LAS CANOAS ROAD SB FACILITY

WATER UTILITIES IMPROVEMENTS



802 EAST COTA STREET, SUITE A SANTA BARBARA, CA 93103 TEL (805) 963-1955

SUZANNE ELLEDGE PLANNING & PERMITTING SERVICES

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1625 State Street

TEL (805) 966-2758

Santa Barbara, CA 93101

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ARCADIA STUDIO, INC.

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971 Cheltenham Road

TEL (805) 452-3031

1616 Anacapa Street

TEL (805) 957-4632

Ventura, CA 93001

TEL (805) 658-0003

1616 Anacapa Street

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COLLINGS & ASSOCIATES, INC

ELECTRICAL ENGINEER

ALAN NOELLE ENGINEERING

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Santa Barbara, CA 93105

TEL (805) 966-2224

FLOWERS & ASSOCIATES, INC.

201 N. Calle Cesar Chavez, Suite 100

LANDSCAPE ARCHITECT

STRUCTURAL ENGINEER

GREER STRUCTURAL ENGINEERING

MECHANICAL ENGINEER

MECHANICAL ENGINEERING CONSULTANTS, INC.

FIRE PROTECTION ENGINEER

ABBREVIATIONS

CENTER LINE PENNY POUND PERPENDICULAR ANCHOR BOLT ASPHALTIC CONCRETE ABOVE FINISH FLOOR AI TERNATE ALUM ALUMINUM ANODIZED APPROX APPROXIMATE ARCHITECT OR ARCHITECTURAL BOARD BUILDING BLOCK(ING) BEAM CATCH BASIN CAST IRON CONSTRUCTION JOINT CLG CLR CONCRETE MASONRY UNIT CO CLEAN OUT COL COLUMN CONCRETE CONTINUOUS CSK COUNTERSINK COLD WATER DOUBLE DEPARTMENT DETAIL DRINKING FOUNTAIN DIAMETER DIAG DIAGONAL DOWN DOWNSPOU' EAST EXISTING EXPANSION JOINT ELEVATION ELECTRIC(AL) EDGE OF PAVING EQUAL EQUIPMENT FLOOR DRAIN FIRE EXTINGUISHER (& CABINET) FINISHED FLOOR FINISHED GRADE FLAT HEAD OR FIRE HYDRANT

FIN

FLR

FOC

FOF

FTG

GALV

GLB

GYP

GWB

HDR

HGT

HORIZ

HTR

ΗВ

FLOW LINE

FACE OF CONCRETE

FACE OF MASONRY

FIBERGLASS REINFORCED PANEL

GRAB BAR, GRADE BREAK

GLUE LAMINATED BEAM

GYPSUM WALL BOARD

HEATING/VENTILATING/AIR

FACE OF FINISH

FOOT OR FEET

FLASHING

FLOOR

FOOTING

GYPSUM

HEADER

HEIGHT

HEATER

HOSE BIBB

HORIZONTAL

CONDITIONING

GALVANIZED

INVERT LAVATORY MATERIAL MAXIMUM MACHINE BOLT MECHANICAL MANUFACTURE OR MANUFACTURER MFR MAN HOLE MINIMUM MISCELLANEOUS MASONRY OPENING NORTH NEW NOT IN CONTRACT NO OR # NUMBER NOT TO SCALE ON CENTER OUTSIDE DIAMETER OPNG OPENING PLATE OR PROPERTY LINE PLASTIC LAMINATE PLAS PLASTER (NUMBER - SEE SPECS) PLYWD PLYWOOD PAINT (NUMBER - SEE SPECS) PRESURE TREATED DOUGLAS FUR ROOF DRAIN REFRIGERATOR REINFORCE OR REINFORCING ROUND HEAD ROUGH OPENING REDWOOD SOUTH SCHEDULE STORM DRAIN SHOWER SHEATHING SIMILAR SMACNA RE: THE ARCH SHEET METAL MANUAL SPEC SPECIFICATION STAINLESS STEEL STANDARD SUSPENDED SYMMETRICAL TOP OF CURB OR TOP OF CONCRETE TOP OF CATCH BASIN TCB TELEPHONE TEMPERATURE OR TEMPERED TONGUE & GROOVE TOP OF PAVING STRUCTURAL TUBING TELEVISION TYPICAL (ITEMS TYPICAL UNLESS SHOWN OR NOTED OTHERWISE) UNDERWRITERS LABORATORIES UNLESS OTHERWISE NOTED VINYL COMPOSITION TILE VERT VERTICAL GRAIN DOUGLAS FIR VENT THRU ROOF WATER CLOSET WHEELCHAIR ACCESSIBLE WOOD WIDE FLANGE WATER HEATER WATERPROOF

WOOD SCREW

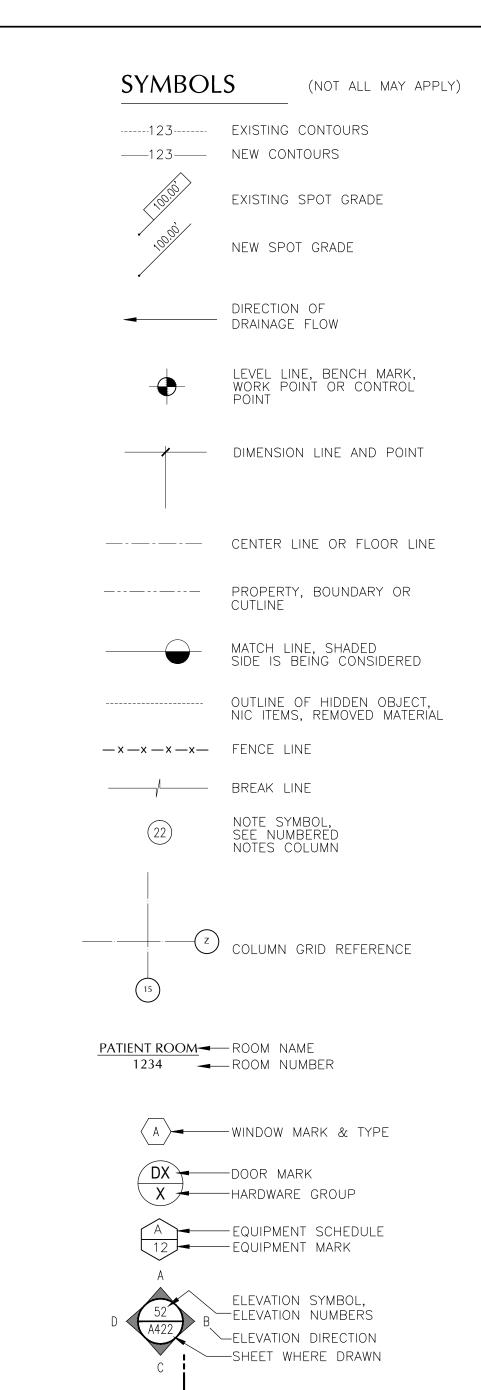
WELDED WIRE FABRIC

WAINSCOT

WITH

W/O WITHOUT

INSULATION OR INSULATED



A SECTION

A301 SHEET WHERE DRAWN

3 --- ENLARGED DETAIL

A601 - SHEET WHERE DRAWN

REVISION NUMBER REVISION CLOUD, OPTIONAL

APPLICABLE CODES

LIST OF 2016 CALIFORNIA CODE OF REGULATIONS APPLICABLE CODES AS OF JANUARY 01, 2017

PART 3, TITLE 24, CCR

2016 CALIFORNIA ADMINISTRATIVE CODE (CAC) PART 1, TITLE 24, CALIFORNIA CODE OF REGUALTIONS (CCR) 2016 CALIFORNIA BUILDING CODE (CBC)

PART 2, TITLE 24, CCR BASED ON THE 2015 INTERNATIONAL BUILDING CODE (IBC) 2016 CALIFORNIA ELECTRICAL CODE (CEC)

BASED ON THE 2014 NATIONAL ELECTRIC CODE (NEC) 2016 CALIFORNIA MECHANICAL CODE (CMC) PART 4, TITLE 24, CCR

BASED ON THE 2015 UNIFORM MECHANICAL CODE (UMC) 2016 CALIFORNIA PLUMBING CODE (CPC) PART 5, TITLE 24, CCR BASED ON THE 2015 UNIFORM PLUMBING CODE (UPC)

2016 CALIFORNIA FIRE CODE (CFC) PART 9, TITLE 24, CCR BASED ON THE 2015 INTERNATIONAL FIRE CODE (IFC)

2016 CALIFORNIA GREEN BUILDING STANDARDS CODE (CGBSC)

SCOPE OF WORK

PROJECT SCOPE OF WORK INCLUDES THE COMPLETE REPLACEMENT OF THE DOMESTIC WATER AND FIRE SPRINKLER WATER SUPPLY LINES TO THE SUBJECT PROPERTY. PROJECT SCOPE INCLUDES DESIGN OF A NEW FIRE SPRINKLER PUMP SYSTEM WITHIN A NEW ENCLOSURE NEAR THE LAS CANOAS ROAD ENTRANCE, AND REPLACEMENT OF THE EXISTING DOMESTIC WATER PUMP SYSTEM WITHIN THE EXISTING PUMP HOUSE. ADDITIONAL SITE IMPROVEMENTS INCLUDE ASSOCIATED LANDSCAPING, IRRIGATION, AND GRADING AS DETAILED IN THESE DRAWINGS.

APN 021-010-012

NOT A PART

APN 021-010-028

APPROXIMATE

AREA OF WORK

PROJECT DATA

PROJECT ADDRESS: 1964 LAS CANOAS ROAD SANTA BARBARA, CA 93105

ZONING: A - 1CURRENT USE: RESIDENTIAL GROUP R-2.1 LOT SIZE: 35.69 ACRES AVERAGE SLOPE: 33% PARKING: 27 SPACES & 30+ SPACES IN 2 LOTS

<u>BUILDINGS:</u> CHAPEL W/ MEETING ROOM DINING HALL & KITCHEN 5,129 SF CONVENT

DORMITORY HOUSING 10,552 SF 5,880 SF CLASSROOM & LIBRARY 920 SF 12,150 SF FACULTY RESIDENCE 5,804 SF PUMP HOUSE 186 SF TOTAL EXISTING SF 48,846 SF

TOTAL EXISTING & PROPOSED SF 49,171 SF

EXISTING IMPERVIOUS AREAS:	AREA:
CHAPEL W/ MEETING ROOM	6,557 SF
FACULTY RESIDENCE	7,289 SF
DINING HALL & KITCHEN	6,974 SF
CONVENT	4,709 SF
CLASSROOM & LIBRARY	3,944 SF
DORMITORY HOUSING	6,421 SF
GYMNASIUM	14,681 SF
WORKSHOP	1,125 SF
GENERATOR ENCLOSURE	181 SF
PUMP HOUSE	251 SF
BREEZEWAYS	5,596 SF
SIDEWALKS	7,751 SF
DRIVEWAY	54,144 SF
GYMNASIUM PARKING	<u>19,728 SF</u>

NEW IMPERVIOUS AREA: NEW IMPERVIOUS (PUMP HOUSE) REPLACED IMPERVIOUS WITH PERVIOUS 5,320 SF REPLACED PERVIOUS 4,120 SF TOTAL NEW IMPERVIOUS 325 SF TOTAL NEW AND/OR REPLACED PERVIOUS 9,440 SF

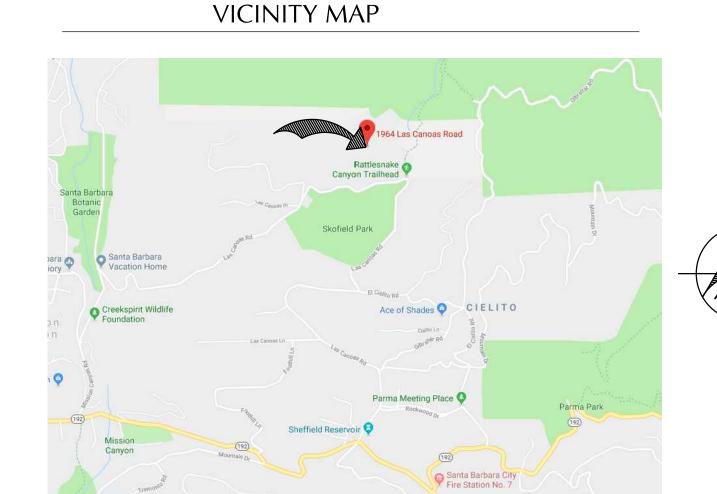
139,351 SF

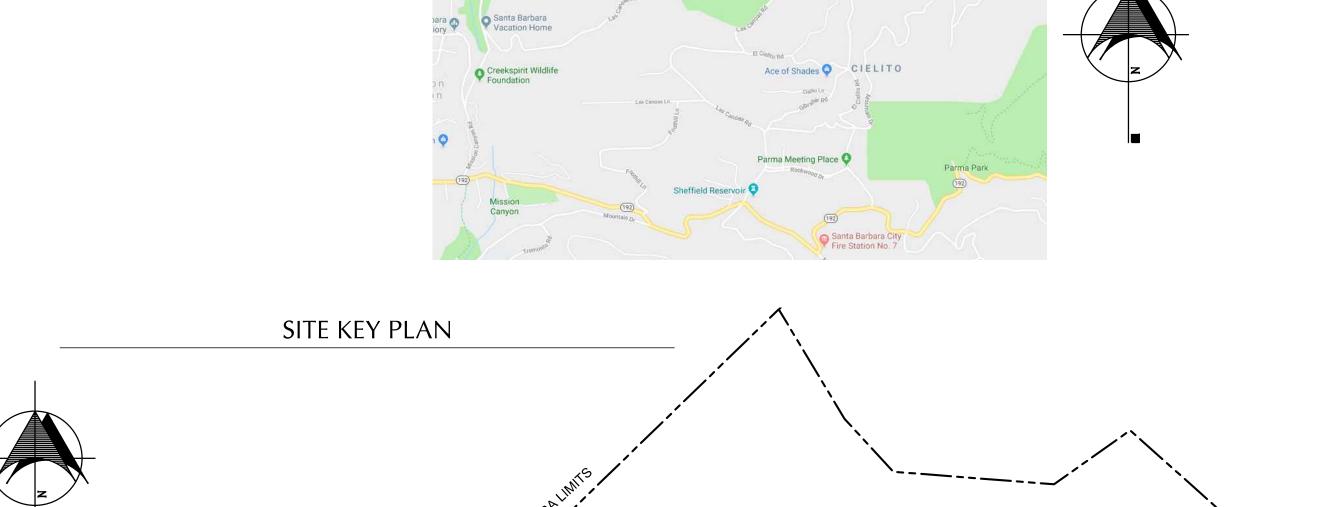
DRAWING INDEX

G-001 TITLE SHEET / GENERAL INFORMATION C-101 WATER SYSTEM IMPROVEMENT PLAN C-102 WATER SYSTEM IMPROVEMENT PLAN OVERVIEW

<u>ARCHITECTURAL</u> A-101 TYPICAL FIRE PUMP ENCLOSURE

LI-1 IRRIGATION PLAN LI-2 IRRIGATION DETAILS LI-3 IRRIGATION SPECIFICATIONS LP-1 PLANTING PLAN LP-2 PLANTING ENLARGEMENT WEST LP-3 PLANTING ENLARGEMENT EAST LP-4 PLANTING DETAILS LP-5 PLANTING SPECIFICATIONS LSK-1 IMAGES & PERSPECTIVES





ARCHITECT STAMP CONSULTANT STAMP AGENCY APPROVAL

REVISIONS

APN 021-010-024

NOT A PART

APN 021-040-024

NOT A PART

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NO.	DATE	DESCRIPTION

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PROJECT OWNER & TITLE

DALLAS, TX 75201

REVERE CAPITAL, LLC 2301 CEDAR SPRINGS RD, SUITE 200

WATER UTILITIES IMPROVEMENTS

1964 LAS CANOAS ROAD SANTA BARBARA, CA 93105

TITLE SHEET /

GENERAL INFORMATION

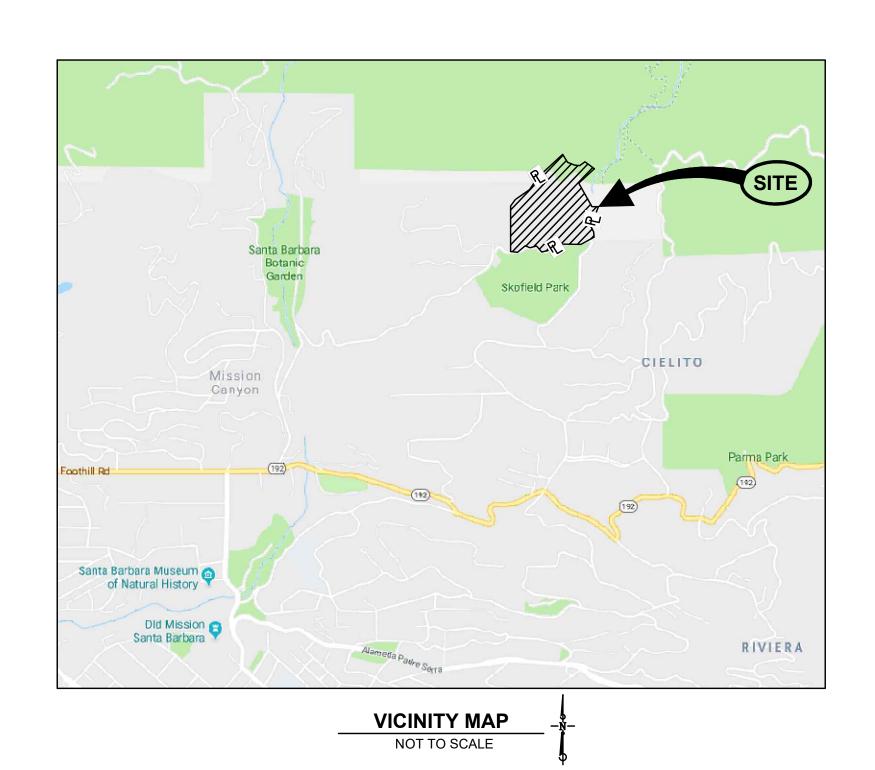
JOB NUMBER: 18045.04

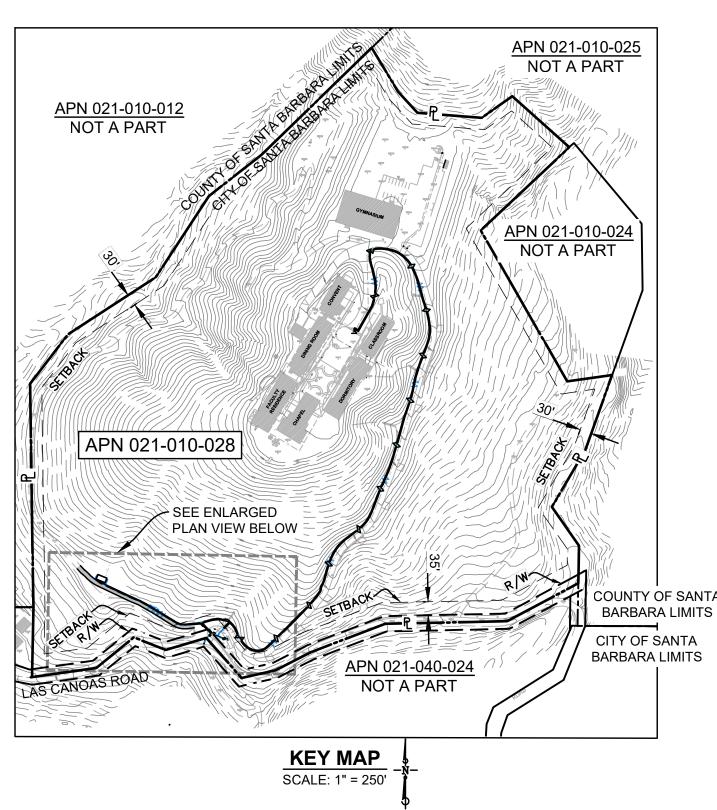
G-001

PRELIMINARY WATER SYSTEM IMPROVEMENT PLANS

LAS CANOAS FACILITY

CITY OF SANTA BARBARA, CALIFORNIA APN NO. 021-010-028





AERIAL TOPOGRAPHY PROVIDED BY:

CENTRAL COAST AERIAL MAPPING, INC.
710 FIERO LN. #24
SAN LUIS OBISPO, CALIFORNIA 93401
TEL: (805) 543-4307 FAX: (805) 543-7257
MAIL@AERIAL-MAPS.COM
CONTOUR INTERVAL: 1' COMPILATION SCALE: 1" = 40'
PHOTOGRAPHY DATED 10-18-2016

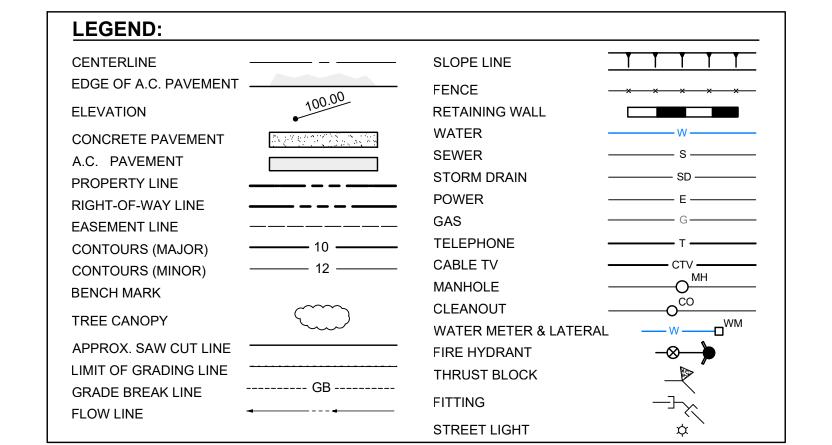
TOPOGRAPHIC SURVEY PROVIDED BY:

WATERS CARDENAS LAND SURVEYING, LLP 5553 HOLLISTER AVENUE, SUITES 7 & 8 GOLETA, CALIFORNIA 93117 TEL: (805) 967-4416 DATED: JUNE 2019 SUPPLEMENTED: NOVEMBER 2019

SURVEY NOTES:

- 1 HORIZONTAL BASIS OF COORDINATES IS NAD83 (1991.35 EPOCH) PER STATION 0005 PER RECORD OF SURVEY BOOK 147, PAGES 70-74.
- VERTICAL DATUM IS NAVD88 PER STATION 0005 PER RECORD OF SURVEY BOOK 147, PAGES 70-74. ELEVATION = 595.86' FEET.

	SHEET INDEX
SHEET NO.	GENERAL DESCRIPTION
1	WATER SYSTEM IMPROVEMENT PLAN
2	WATER SYSTEM IMPROVEMENT PLAN

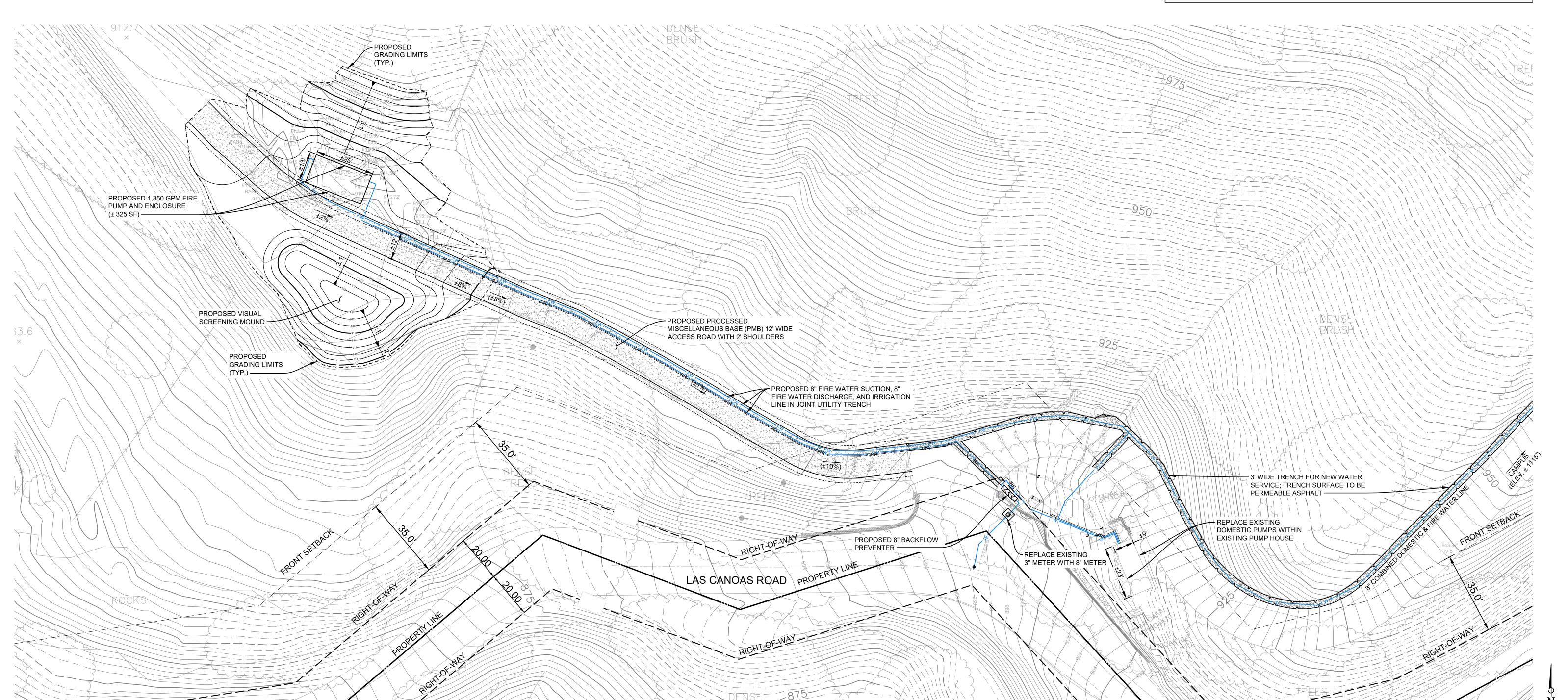




RAW CUT: 315 CUBIC YARDS NOTE:

RAW FILL: 290 CUBIC YARDS BE BALANCED ON SITE

NOTE: SHRINKAGE, CONSOLIDATION AND SUBSIDENCE FACTORS AND LOSSES DUE TO CLEARING AND DEMOLITION OPERATIONS ARE NOT INCLUDED. ESTIMATED RAW EARTHWORK QUANTITIES ARE BASED ON THE APPROXIMATE DIFFERENCE BETWEEN EXISTING GRADES AND PROPOSED FINISH GRADES AS INDICATED ON THE PLANS. STRUCTURAL SECTIONS FOR PAVING AND HARDSCAPE ARE NOT INCLUDED IN THESE ESTIMATES. AND FINAL FARTHWORK WILL VARY ACCORDING TO THESE FACTORS AND LOSSES.



802 EAST COTA STREET, SUITE A SANTA BARBARA, CA 93103

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SUZANNE ELLEDGE PLANNING & PERMITTING SERVICES 1625 State Street Santa Barbara, CA 93101 TEL (805) 966-2758

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ALAN NOELLE ENGINEERING

1616 Anacapa Street

Santa Barbara, CA 93101

TEL (805) 563-5444

* C-29353

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C-29353

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AGENCY APPROVAL

NO. DATE DESCRIPTION

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PROJECT OWNER & TITLE

IN PART AT ANY OTHER SITE

REVERE CAPITAL, LLC
2301 CEDAR SPRINGS ROAD
SUITE 200
DALLAS, TX 75201

WATER UTILITIES IMPROVEMENTS

1964 LAS CANOAS ROAD SANTA BARBARA, CA 93105

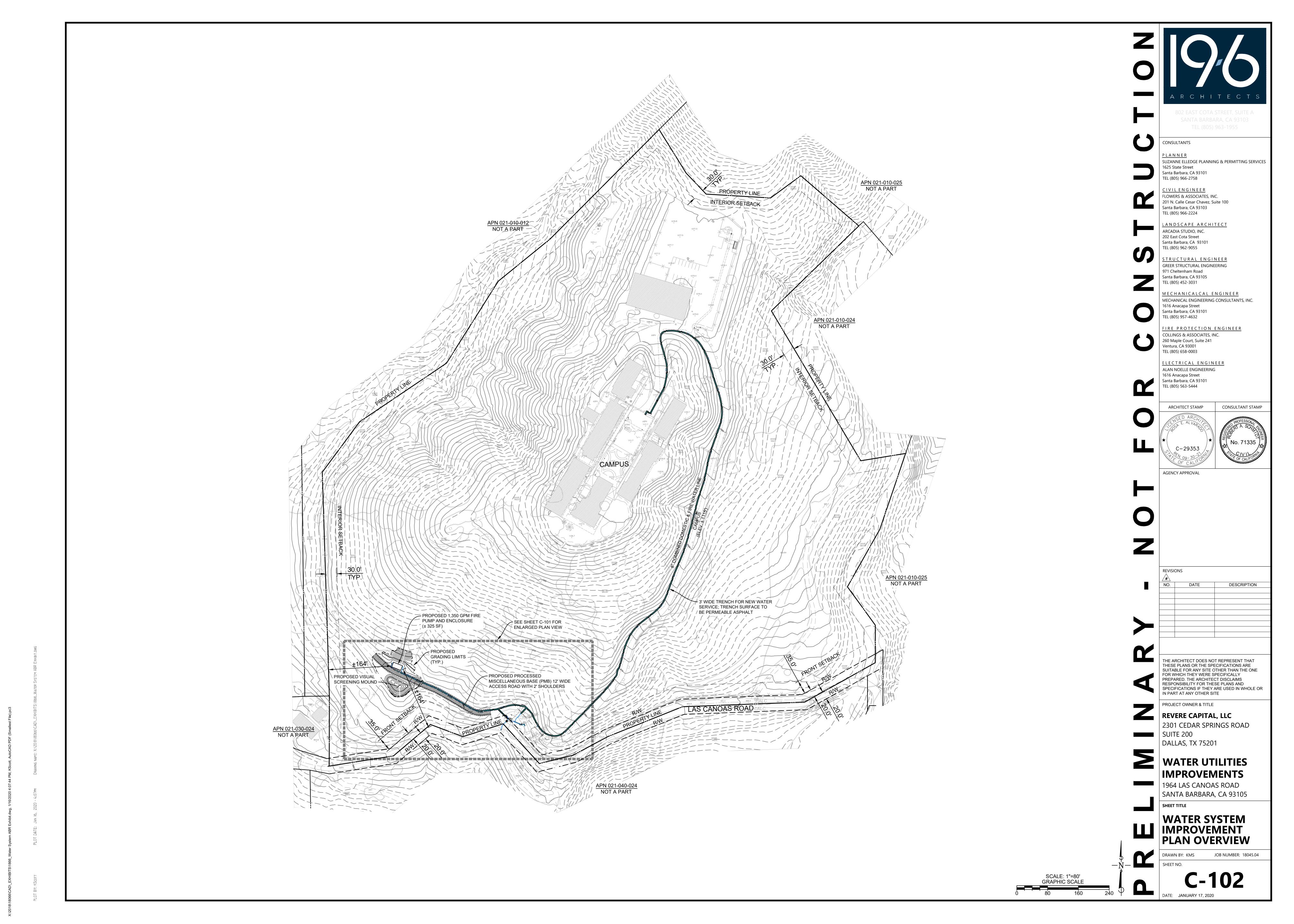
WATER SYSTEM IMPROVEMENT

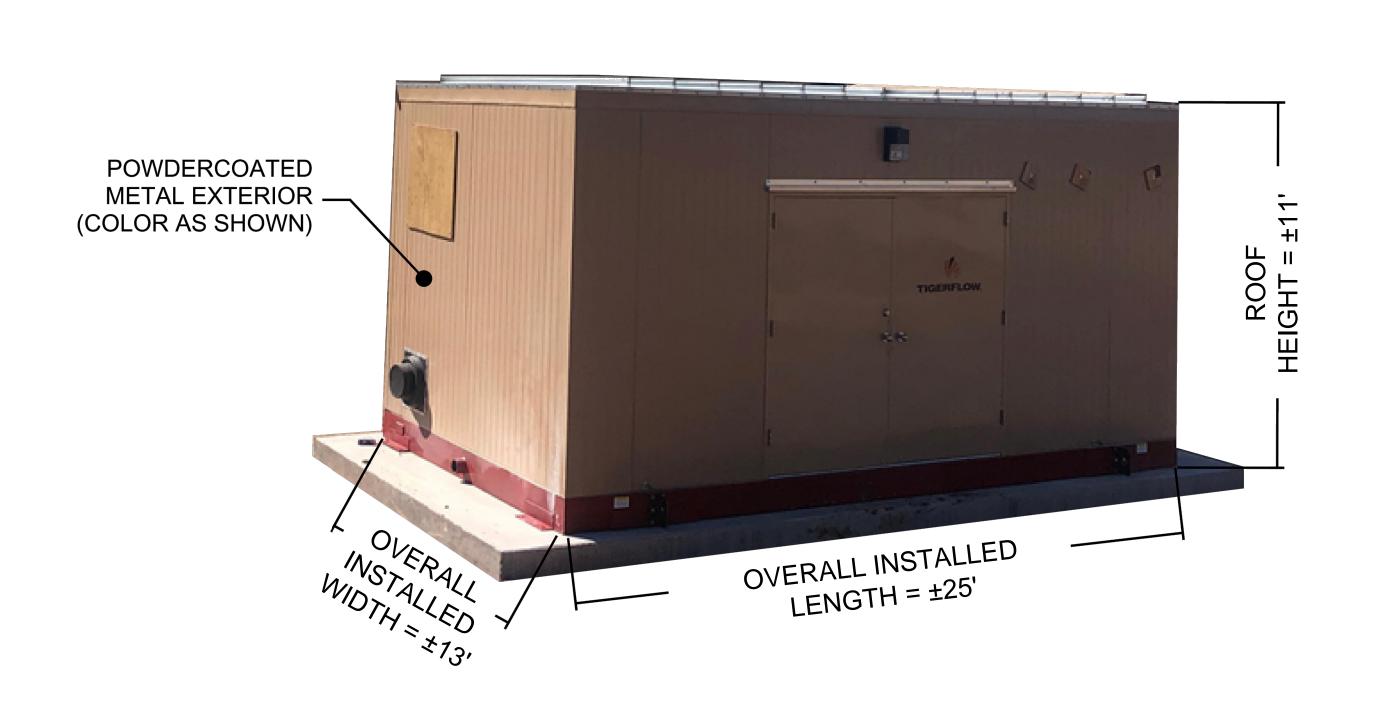
DRAWN BY: KMS JOB NUMBER: 18045.04

ET NO.

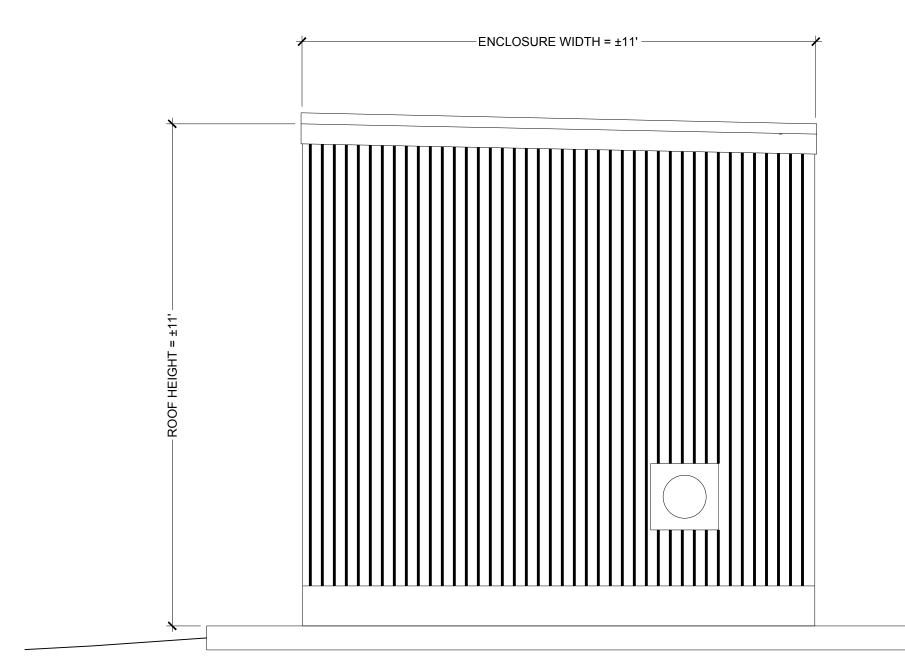
TE: JANUARY 17, 2020

SCALE: 1"=20' GRAPHIC SCALE

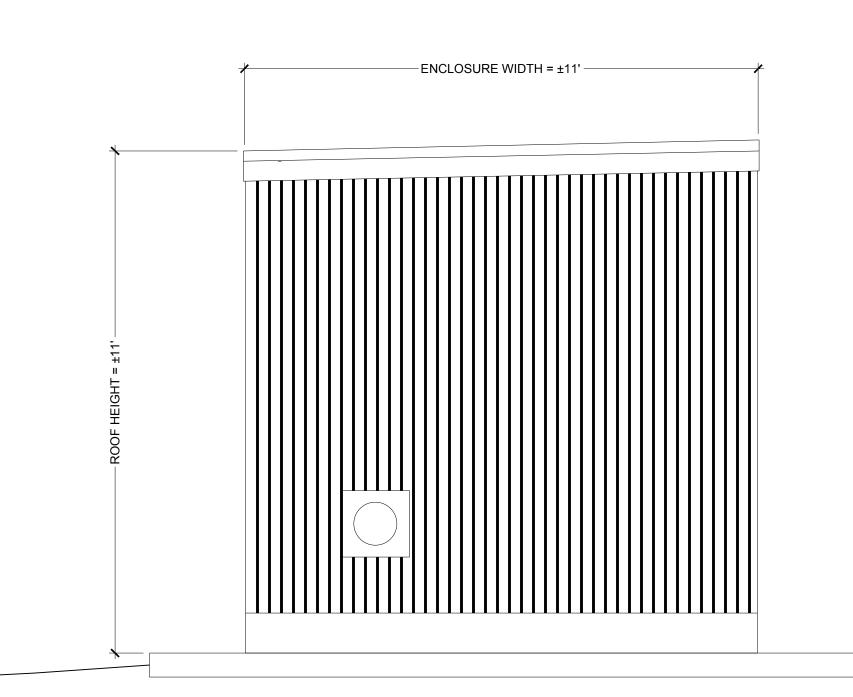




1 TYPICAL FIRE PUMP ENCLOSURE
NOT TO SCALE

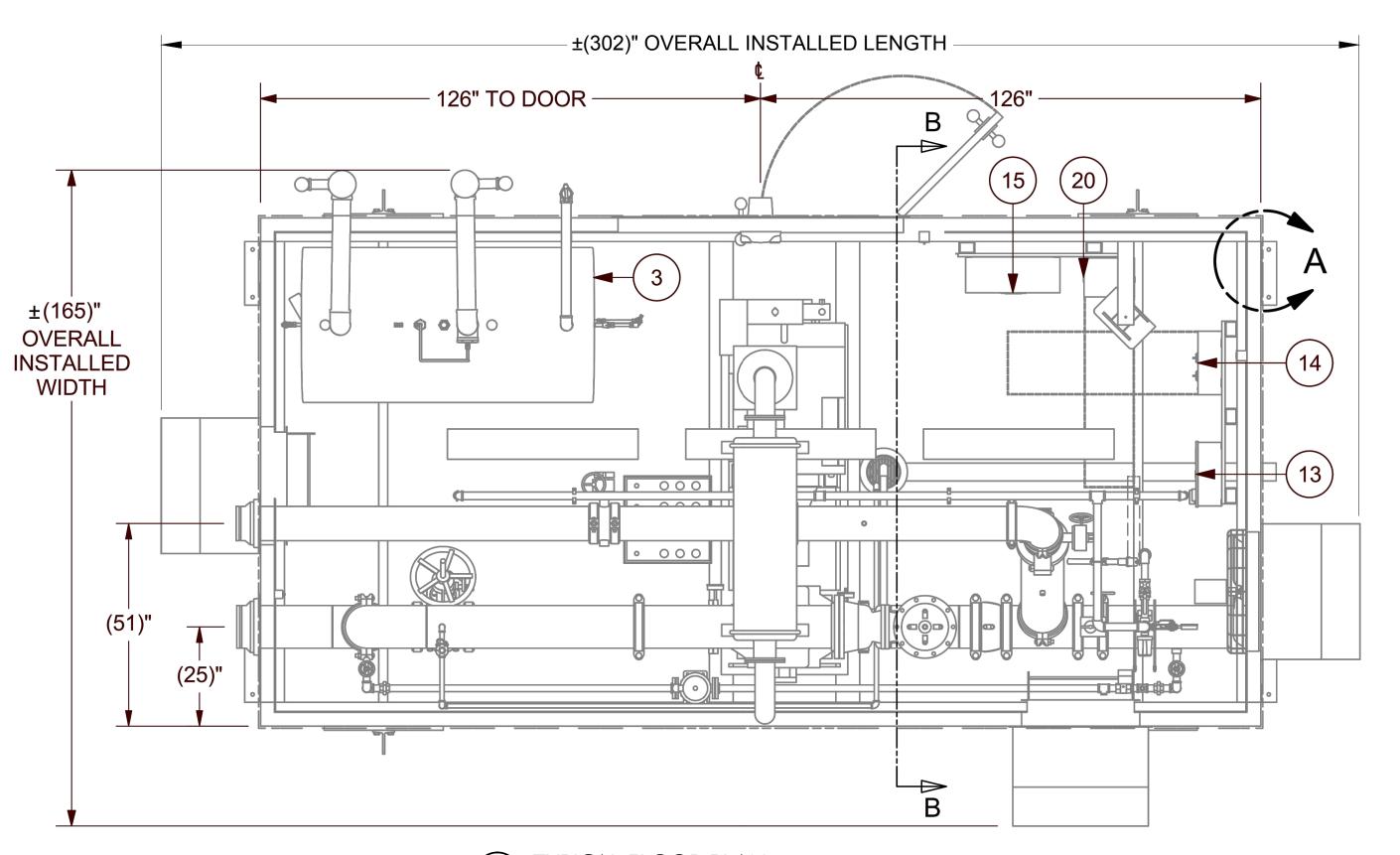


TYPICAL ENCLOSURE EXTERIOR ELEVATION - EAST



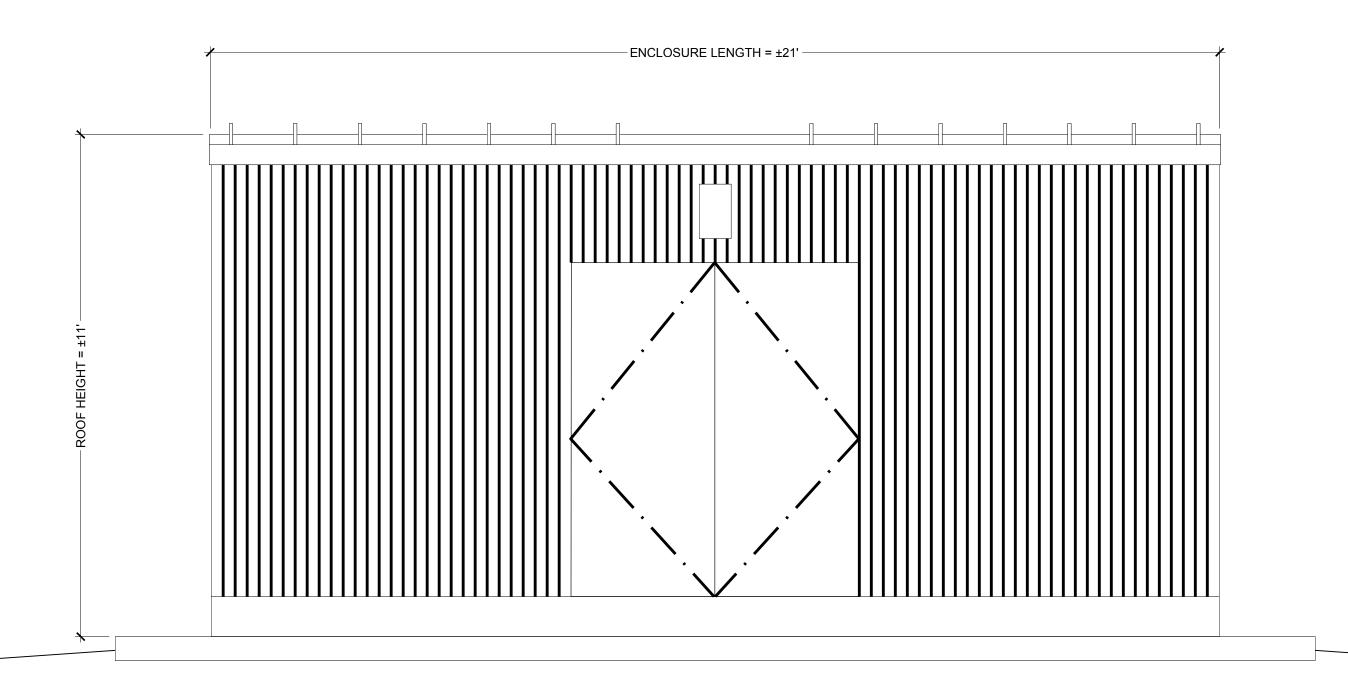
TYPICAL ENCLOSURE EXTERIOR ELEVATION - WEST

1/2" = 1'-0"



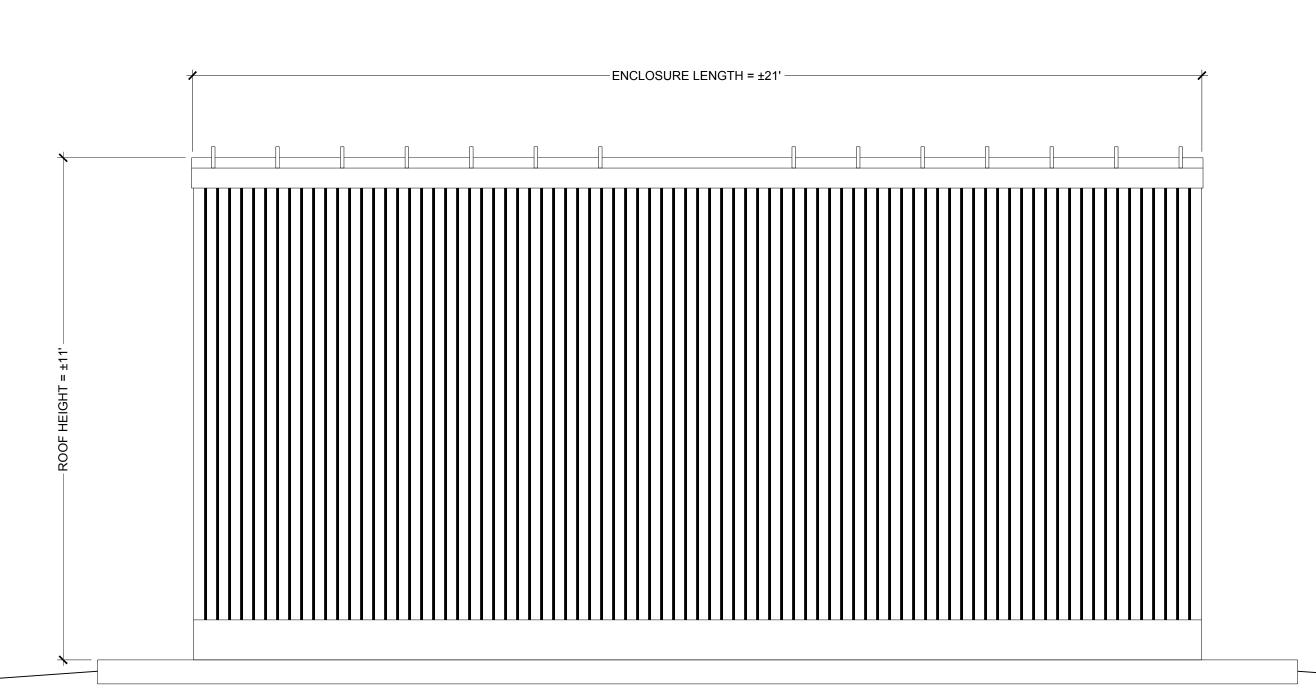
2 TYPICAL FLOOR PLAN

1/2" = 1'-0"



4 TYPICAL ENCLOSURE EXTERIOR ELEVATION - SOUTH

1/2" = 1'-0"



6 TYPICAL ENCLOSURE EXTERIOR ELEVATION - NORTH

ARCHITECTS

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ARCHITECT STAMP	CONSULTANT STAMP
* C-29353 OF CALFORD	
AGENCY APPROVAL	

REVISIONS

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PROJECT OWNER & TITLE

REVERE CAPITAL, LLC
2301 CEDAR SPRINGS RD, SUITE 200
DALLAS, TX 75201

WATER UTILITIES IMPROVEMENTS

1964 LAS CANOAS ROAD SANTA BARBARA, CA 93105

DATE: JANUARY 17, 2020

TYPICAL FIRE PUMP ENCLOSURE

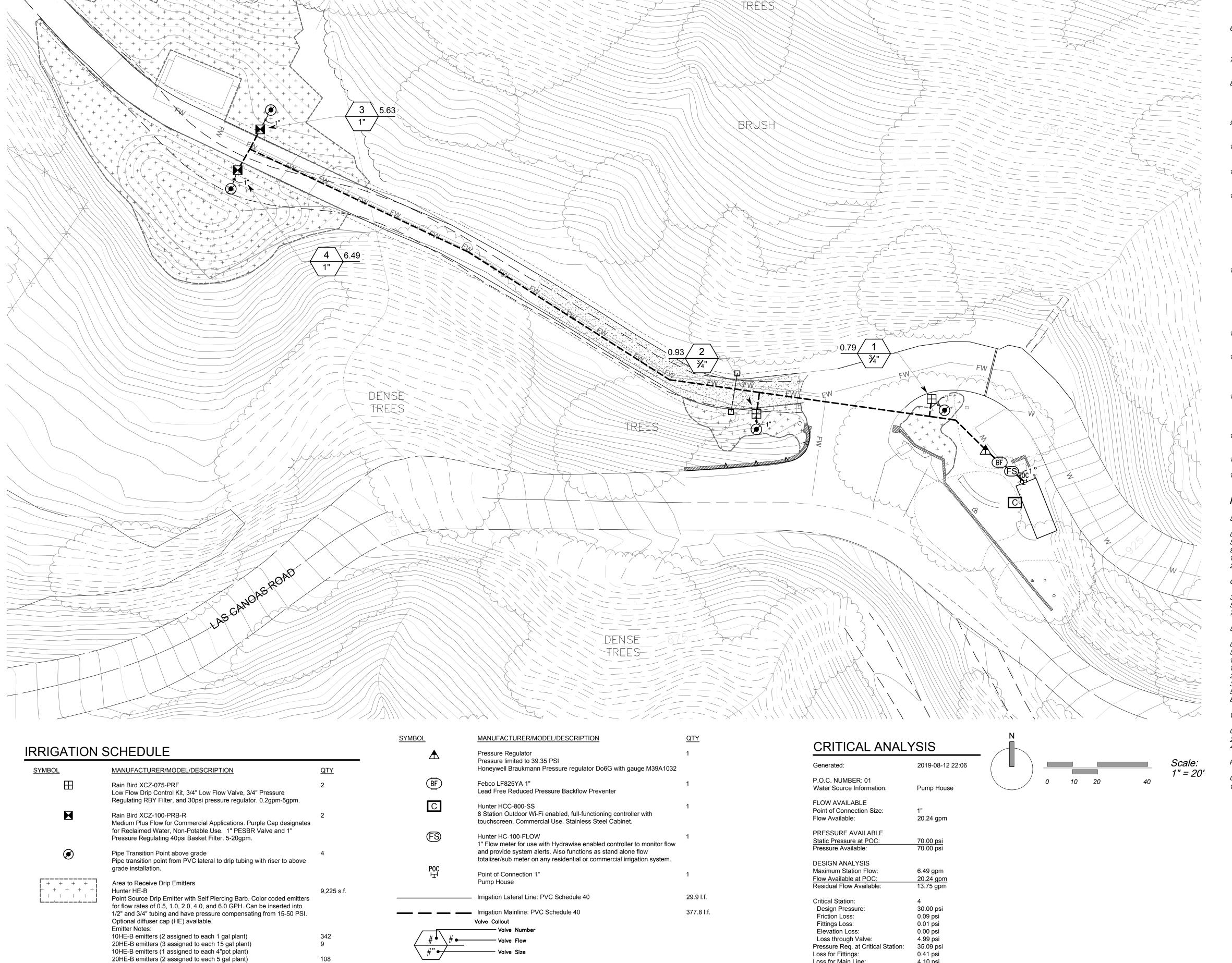
DRAWN BY: QP JOB NUMBER: 18045.04

SHEET NO.

A-101



10HE-B emitters (1 assigned to each flat plant)



4.10 psi

Loss for Main Line:

Loss for Backflow:

Loss for POC to Valve Elevation: 0.00 psi

Critical Station Pressure at POC: 50.57 psi

Pressure Available: 70.00 psi Residual Pressure Available: 19.43 psi

Irrigation Notes:

1. See irrigation legend for complete descriptions of all symbols shown on irrigation plan.

- 2. Point of connection is at the approximate location shown on plan.
- Install all valves in locking plastic valve boxes in groundcover area adjacent to pavement (2'-0" maximum) for ease of access. Identify locations and flag on site for Landscape Architect's approval <u>BEFORE</u> excavating for installation.
- All irrigation emission devices shall meet the criteria as set forth in MWELO Section 492.7(a)(I)(M). Install irrigation system in accordance with manufacturer's specifications, irrigation details, and local codes.
- Install pressure regulating devices where necessary to ensure that the dynamic pressure at each emission device is withing manufacturer's recommended pressure range for optimal performance per MWELO Section 492.7(a)(1)(C).
- Indicated pipe locations are schematic. Do not place pipe under paving except where absolutely necessary. Coordinate pipe installation with other trades.
- All piping installed under paving, through walls or footings must be placed inside Schedule 40 PVC sleeves of adequate size to allow free movement of the pipe in the sleeve. All pipe runs in sleeves must be straight, with no bends or angles. Sleeves for recycled-water irrigation lines shall be colored to match the pipe.
- 9. Locate irrigation controller at approximate location shown on plan. 110-v j-box by others. Obtain Landscape Architect's approval of location before installing.
- 10. Emitters shall be located on grade and staked a minimum of 6" (six inches) from the center of the plant, or at outer edge of rootball, whichever is greater.
- 11. Install flush end valves at the ends of all $\frac{5}{8}$ " polyethylene drip tubing in round valve boxes with gravel fill.
- 12. Install irrigation lines at the following minimum depths:

Schedule 40 and class 315 PVC mainline: 18" minimum cover Schedule 40 PVC lateral line: 12" minimum cover

microtubing with plastic stake manufactured for that purpose.

 $\frac{5}{8}$ " polyethylene drip tubing: place on grade with stakes @ 6' O.C. $\frac{1}{4}$ " polyethylene micro-tubing: place on grade

**Install all rigid pipe as near to edges of planting areas, to avoid conflict with large plants.

13. Emitter layout: 2- 1 GPH (Hunter 10HE-B) emitters per plant 1 gallon plant: 2- 2 GPH (Hunter 20HE-B) emitters per plant 5 gallon plant: 3- 2GPH (Hunter 20HE-B) emitters per plant 15 gallon plant: Punch emitter into polyethylene tubing. Attach microtubing to emitter. Attach bug cap to open end of microtubing. Bring microtubing to edge of rootball. Stake end of

- 14. In the event of discrepancies in irrigation equipment count, quantities indicated by symbols on the plan prevail.
- 13. Include in the contract price a sufficient amount to allow for supply and installation of additional irrigation equipment to be used. Include 100 linear feet of lateral line and 100 linear feet of mainline. Provide the unit price for such irrigation equipment in the bid and credit the owner for
- 14. In vicinity of existing trees, use discretion to route lateral lines and mainline as necessary to avoid root damage. Under canopies of existing trees, excavate using hand tools, and route pipe under roots with a minimum 4" clearance. Do not cut roots larger than 2" (two inches) in diameter, unless approved by the Landscape Architect.
- 15. Verify location of backflow preventer, master control valves, controller and point of connection with Landscape Architect prior to installation.
- 16. Install check valves at the low end of all irrigation lines to prevent low head drainage.
- 17. Landscape Contractor to coordinate with project plumber, and ensure all necessary stub-out locations for podium or raised planters are correct during construction.

Irrigation Pine Sizing Guidelines

each piece of equipment not installed.

Irrigation	Pipe Sizing G	Guidelines:	
Schedule 40 ma	ainline up to 1-1/2"	Landscape Design for Water Conservation Compliance Statement	
0-4 gpm 5-8 gpm 9-12 gpm	1/2" 3/4" 1"	Mandatory Measures: (Show calculations of required areas on referenced sheets.)	Sheet #
13-22 gpm 23-30 gpm	1-1/4" 1-1/2"	No turf in parkways, medians or other areas with any dimension of < 8 feet	LP-1
Class 315 main	line 2" and up	No turf on >20% slope	LP-1
30-50 gpm 51-70 gpm 71-100 gpm	2" 2- 1/2" 3"	Residential, mixed-use & institutional projects, ≥80% of site's landscaped area in water wise plants; Commercial projects, 100% of landscaped area planted with water wise plants	LP-1
Schedule 40 lat	eral line	Three inches of mulch, specified as required	LP-1 notes
0-4 gpm 5-10 gpm 11-16 gpm 17-26 gpm	1/2" 3/4" 1" 1-1/4"	Areas of sprinkler coverage avoids overspray and runoff, including optimum distribution uniformity, head-to-head spacing and setbacks from walkways and pavement	LI-1
27-35 gpm 36-55 gpm 56-80 gpm	1-1/2" 2" 2-1/2"	Sprinklers have matched precipitation rates within each valve and circuit	LI-1
81-120 gpm Weathermatic v	3" ralves	Valves separated for individual hydrozones based on plant water needs and sun/shade requirements	LI-1
0-20 gpm 20-40 gpm 40-80 gpm	1" 1-½" 2"	Weather based irrigation controller with a rain shutoff sensor for the entire irrigation system if including an automatic irrigation system	LI-1
Rainbird XCZ di	rip valves	Areas less than 8' wide irrigated only with bubblers, rotating nozzles on pop-up bodies, subsurface, or drip irrigation	LI-1
0-15 gpm 15-40 gpm	1" 1-½"	Drip/low volume irrigation system on >25% of landscaped area	LI-1
		Check valves (inline or integrated) located to prevent unwanted draining of irrigation lines	LI-1
		Pressure regulator(s) scheduled for mainline(s) if necessary, inline regulators at each valve	LI-1
		Grading encourages water retention and infiltration by preserving open space and creating depressed areas/swales	See Civil
		Grading mimics natural, pre-development hydrologic flow paths and maintains and/or increases the width of flow paths in order to decrease flow rates Calculations:	See Civil
		Drip irrigation is provided on greater than 80 percent of landscape as Total landscape area: 9,322 square feet Low water use 9,322 sf =100%	rea.
		I state that I am familiar with the Landscape Design Standards for W	

Conservation as most recently adopted by the Santa Barbara City Council and that

understanding that verification of compliance will be necessary upon final building

inspection. I shall inspect the completed installation and I will submit in writing that

Laurie Romano

Exp. Date August 30, 2021

the landscape design for this project complies with those standards. It is my

the installation substantially conforms to the approved plans.

In tomano

Signature

License # 2911

802 EAST COTA STREET, SUITE A SANTA BARBARA, CA 93103 TEL (805) 963-1955

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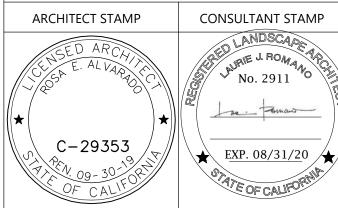
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AGENCY APPROVAL

REVISIONS DESCRIPTION

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PROJECT OWNER & TITLE

IN PART AT ANY OTHER SITE

REVERE CAPITAL, LLC 2301 CEDAR SPRINGS RD, SUITE 200 DALLAS, TX 75201

WATER UTILITIES IMPROVEMENTS

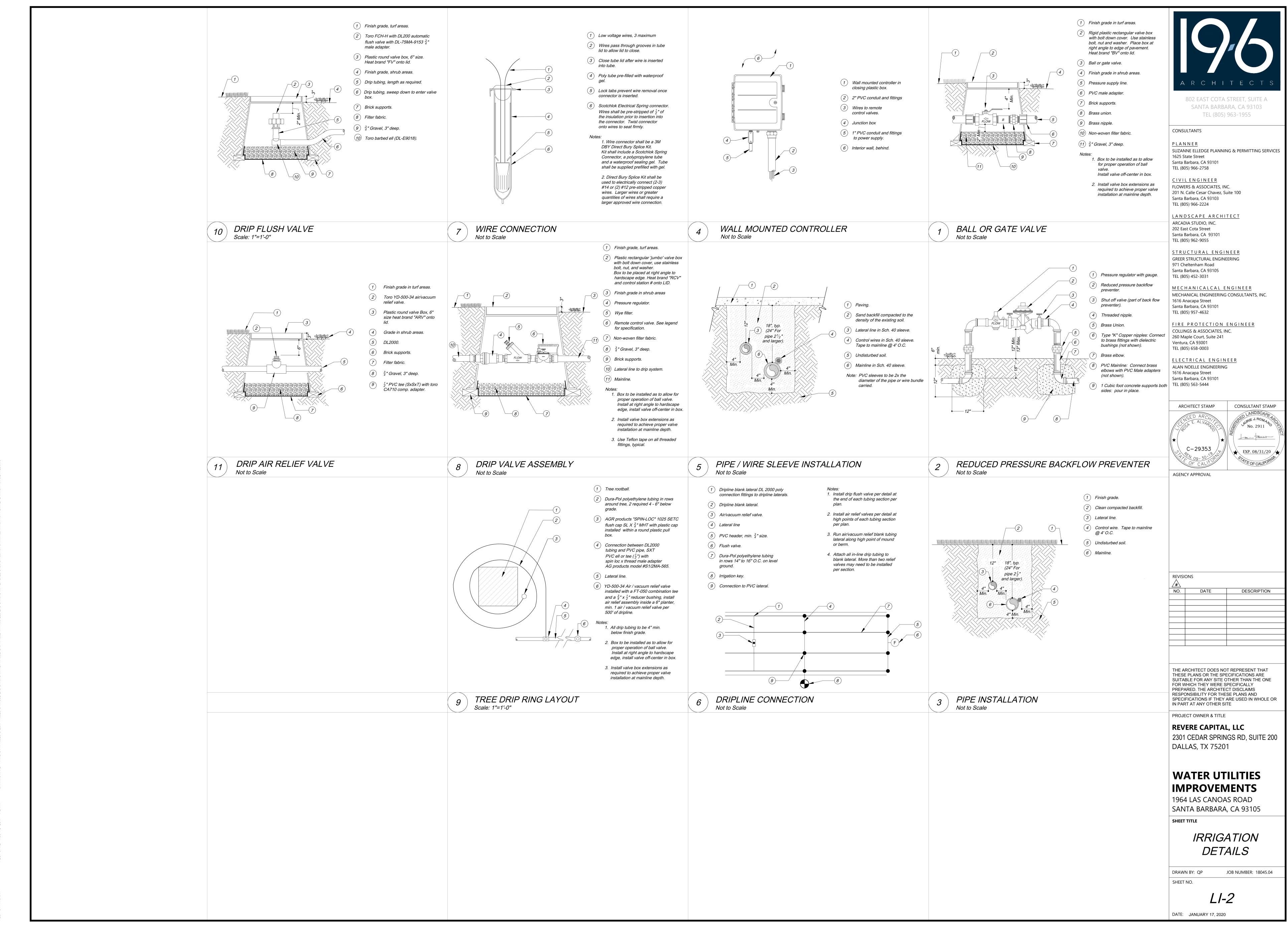
1964 LAS CANOAS ROAD SANTA BARBARA, CA 93105

SHEET TITLE

IRRIGATION PLAN

JOB NUMBER: 18045.04 DRAWN BY: QP

L1-1



PLOT DATE: Aug 14. 2019 - 9:24PM DRAWING NAME: \\ARCADIA\PROJECTS\2019 PROJECTS\19.032 LAS CANGAS WATER\19.032 CAD\19.032 IN PROGRESS\LAS CANGAS WA

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Las Canoas Water

PART 1 - GENERAL

0.2 SUMMARY

Las Canoas Water

SECTION 028100 - IRRIGATION

0.1 RELATED DOCUMENTS

apply to this Section.

This Section includes the following:

Pipe sleeves.

Related Sections include the following:

0.3 QUALITY ASSURANCE AND REQUIREMENTS

Explanation of Drawings:

planting and architectural features.

REVISION NECESSARY.

Drawings and general provisions of the Contract, including the Project Conditions of Approval, General and Supplementary Conditions and other Division 1 Specification Sections,

Valves, backflow preventer, and fittings.

Division 2 Section "Landscape Planting".

Division 2 Section "Landscape Maintenance".

Permits and Fees: Obtain and pay for required permits and inspections.

directions covering points not shown in the Drawings and Specifications.

provisions of these Specifications and Drawings shall take precedence.

whether or not specifically mentioned in the Specifications.

followed in all cases where the manufacturers of the articles used in this Contract furnish

regulations governing or relating to any portion of this Work are hereby incorporated into and

made a part of these Specifications, and their provisions shall be carried out by the Contractor.

Anything contained in these Specifications shall not be construed to conflict with any of the

above rules and regulations or requirements of the same. However, when these Specifications

and Drawings call for or describe materials, workmanship, or construction of a better quality,

higher standard, or larger size than is required by the above rules and regulations, the

Excavating and backfilling Irrigation System Work.

Definition: The words Landscape Architect as used herein shall refer to the Owner's

Manufacturer's Directions: Manufacturer's directions and detailed drawings shall be

Ordinances and Regulations: All local, municipal and state laws, rules and

028100 - 1

Due to the scale of the Drawings, it is not possible to indicate all offsets,

Furnish and install all Work called for on the Drawings by notes or details

Do not install the Irrigation System as shown on the Drawings when it is

fittings, sleeves, etc., which may be required. The Contractor shall carefully investigate

the structural and finished conditions affecting all of the Work and plan the Work

accordingly, furnishing such fittings, etc. as may be required to meet such conditions.

Drawings are generally diagrammatic and indicative of the Work to be installed. The

Work shall be installed in such a manner as to avoid conflicts between irrigation systems,

obvious in the field that obstructions, grade differences or discrepancies in area

dimensions exist that might not have been considered in design. Bring such

obstructions or differences to the attention of the Landscape Architect. In the event this

notification is not performed, the Contractor assumes FULL RESPONSIBILITY FOR ANY

Controller(s), control wire.

Automatic Irrigation System including piping, fittings, sprinkler heads and

Associated interior and exterior plumbing, and accessories to complete

evidence in writing to the Landscape Architect at the conclusion of the Project that this All electric control valves shall have a manual flow adjustment. Provide and install one control valve box for each electric control valve. Equipment to be Furnished: Control Valve Boxes: Supply as a part of this Contract the following tools: Heavy duty rectangular box, Carson, Ametek, Roby, with lockable lid. Two (2) sets of special tools required for removing, Install as detailed. Burn the valve number on the lid of the valve box with a branding iron disassembling and adjusting each type of sprinkler and valve supplied on this manufactured for that purpose. Install a plastic pre-printed valve tag with a number corresponding to the valve number on each valve. Two (2) five foot valve keys for operation of gate valves. Use 10" x 10-1/4" round box for all gate valves. Extension Two (2) keys for each automatic controller. One (1) quick coupler key and matching hose swivel for sleeve, where required, shall match box. every five (5) or fraction thereof of each type of quick coupling valve installed. Use 12" x 17" measured top rectangular box for all remote control valves. Extension sleeve, where required, shall match box Turn over the above-mentioned equipment to the Owner at the conclusion of the Project. Evidence that the Owner has received material must be Use 15" x 21" measured top jumbo rectangular box for all remote control drip assembly valves. Extension sleeve, where required, shall shown to the Landscape Architect before final project review. match box 0.5 PRODUCT DELIVERY, STORAGE AND HANDLING Sprinkler Heads: Handling of PVC pipe and fittings: Exercise care in handling, and storing of PVC pipe All sprinkler heads shall be of the same size, type, and deliver the same and fittings. Transport all PVC so as not to subject it to undue bending or concentrated rate of precipitation with the diameter (or radius) of throw, pressure, and discharge as external load at any point. Any section of pipe that has been dented or damaged will be shown on the Drawings or as specified. discarded and, if installed, shall be replaced with new piping. Spray heads shall have a screw adjustment. Riser units shall be fabricated in accordance with the details as shown on the Drawings. 0.6 GUARANTEE Riser nipples for all sprinkler heads shall be the same size as the riser opening in the sprinkler opening. All sprinkler heads shall be as specified. The guarantee for the irrigation system shall be made in accordance with the following form. The General conditions and Supplementary conditions of these specifications shall be filed with Owner or his representative prior to acceptance of the irrigation system. Drip Irrigation Equipment: A copy of the guarantee form shall be included in the operations and maintenance Drip Emitters: type as indicated on Drawings. Pressure Regulator: type as indicated on Drawings. Y-Filter: Ag Products or approved equal. The guarantee form shall be re-typed onto the Contractor's letterhead and contain the Stainless steel wire staples to secure polyethylene tubing and plastic following information: tubing stakes as necessary to locate emitters. Polyethylene Tubing and Micro-Tubing: 0.7 GUARANTEE FOR IRRIGATION SYSTEM Rain Bird Xeri-Tube 700 1/2 ", Polyethylene tubing or approved equal for spot emitter drip applications. We hereby guarantee that the irrigation system we furnished and installed is free from Rain Bird XT-025 1/4" Distribution tubing or approved equal defects in materials and workmanship, and work has been completed in accordance with the for spot emitter drip applications. drawings and specifications, ordinary wear and tear and unusual abuse or neglect excepted. We agree to repair or replace any defects in material or workmanship which may develop during Flush End Valve: size and type as indicated on Drawings or approved the period of one year from the date of acceptance and also to repair or replace any damage resulting from the repairing or replacing of such defects at no additional cost to the Owner. We shall make such repairs or replacements within a reasonable time, as determined by the Owner, Rainfall Shut-off Device: size and type as indicated on Drawings as part of after receipt of written notification. In the event of our failure to make such repairs or weather-sensing system. replacement within a reasonable time after receipt of written notice from the Owner, we authorize the Owner to proceed to have said repairs or replacements made at our expense and we will pay the costs and charges therefore upon demand. PART 3 - EXECUTION 028100 - 4 028100 - 7 Las Canoas Water Las Canoas Water Include following information: 0.1 INSPECTION PROJECT: Site Conditions: CONTRACTOR: ADDRESS: All scaled dimensions are approximate. The Contractor shall check and verify all size dimensions and report any discrepancies to the Landscape Architect prior PHONE NUMBER: to proceeding with Work in this Section. Exercise extreme care in excavating and Working near existing utilities. DATE OF ACCEPTANCE: Contractor shall be responsible for damages to utilities that are caused by the Contractor's operations or neglect. Check existing utilities Drawings for existing utility PART 2 - PRODUCTS Coordinate installation of irrigation materials including pipe, so they do not interfere with utilities or other construction or cause difficulty in planting trees, shrubs and groundcovers. 0.1 MATERIALS Carefully check grades before starting Work on the Irrigation System. General: Use only new materials of brands and types noted on Drawings, specified 0.2 PREPARATION Copper: ASTM B88, Type L, hard-drawn copper tube and wrought solder type, paint Physical Layout: PVC Pressure Main Line Pipe and Fittings:

Las Canoas Water

Las Canoas Water

Prior to installation, stake out all pressure supply lines, routing and location of sprinkler heads. Pipe layout must be approved by Landscape Architect prior to Pressure main line piping for sizes 2" and larger shall be Pacific Western (or approved equal) PVC Class 315 pipe. Pipe shall be made from an NSF approved Type I, Grade I PVC compound conforming to ASTM resin specification D1784. All Water Supply pipes must meet requirements as set forth in Federal Specification PS-22-70, with an appropriate standard dimension (S.D.R.) (Solvent-weld pipe). Connect the irrigation system to water supply point of connection Pressure main line piping for sizes 1-1/2" and smaller shall be Pacific indicated. Western (or approved equal) PVC Schedule 40 pipe. Pipe shall be made from NSF Make connections at approximate locations shown. Contractor is approved Type I, Grade I PVC compound conforming to ASTM resin specification 1785. responsible for minor changes caused by actual site conditions. All pipes must meet requirements as set forth in Federal Specification PS-21-70. PVC solvent-weld fittings shall be Schedule 40, 1-2, II-I NSF approved Electrical Supply: conforming to ASTM test procedure D2466. Solvent cement and primer for solvent-weld and fittings shall be of type and installation methods prescribed by the manufacturer. Make electrical connections for automatic controller to electrical points of All PVC pipe must bear the following markings: Make connections at approximate locations as shown. Contractor is responsible for minor changes caused by actual site conditions. Manufacturer's name Nominal pipe size Schedule or class 0.3 INSTALLATION Pressure rating in P.S.I. NSF (National Sanitation Foundation) approval Date of extrusion. Dig trenches straight and support pipe continuously on bottom of trench. All fittings shall bear the manufacturer's name or trademark, material Lay pipe to an even grade. Trenching excavation shall follow layout indicated on designation, size, applicable I.P.S. schedule and NSF seal of approval Drawings and as noted. Provide for a minimum of eighteen (18) inches cover for all pressure PVC Non-Pressure Lateral Line Piping: Non-pressure buried lateral line piping shall be Pacific Western (or

Provide for a minimum of twelve (12) inches cover for all non-pressure lines. Pipe shall be made from NSF approved, Type I, Grade II PVC compound Provide for a minimum of six (6) inches cover for all drip irrigation lines unless otherwise specified in the Drawing Details. 028100 - 8

Las Canoas Water

028100 - 5

Make connections between the automatic controller(s) and the electric

Wiring shall occupy the same trench and shall be installed along the

Where more than one (1) wire is placed in a trench, tape the wiring

Expansion curl shall be of sufficient length at splice connection at each

Provide an expansion curl within three (3) feet of each wire connection.

Make all splices with 3M DBY Direct burial splice kit or approved equal.

Final location of automatic controller shall be approved by Owner

Automatic controller shall be per Drawings.

All electric control valves shall be per Drawings

Field splices between the automatic controller and electrical control

Unless otherwise noted on the Drawings, the 120-volt electrical power to

028100 - 6

PVC Ball valves.

Install per installation detail

Provide for a minimum of eighteen (18) inches cover for all control wiring. Do not backfill trenches until all required tests are performed. Carefully backfill trenches with the excavated materials approved for backfilling, consisting of earth, loam, sandy clay, sand, or other approved materials, free from large clods of earth or stones. Mechanically compact backfill in landscaped areas to a dry density equal to adjacent undisturbed soil in planting area. Backfill will conform to adjacent grades without dips, sunken areas, humps or other surface irregularities. Place a fine granular material backfill to a depth of 6" immediately above all lines. No foreign matter larger than one-half (1/2) inch in size will be permitted in the initial backfill. Flooding of trenches will be permitted only with the approval of the Landscape Architect. If settlement occurs and subsequent adjustments in pipe, valves, sprinkler heads, lawn or planting, or other construction are necessary, make all required adjustments without cost to the Owner. Trenching and Backfill Under Paving: Backfill trenches located under areas where paving, asphaltic concrete or concrete will be installed with sand (a layer six [6] inches below the pipe and three [3] inches above the pipe) and compact in layers to 95% compaction, using manual o mechanical tamping devices. Compact trenches for piping to equal the compaction of the existing adjacent undisturbed soil and leave in a firm unyielding grade. Set in place, cap and pressure test, all piping under paving prior to the paving Work. Piping under existing walks is generally done by jacking, boring or hydraulic driving, but where any cutting or breaking of sidewalks and/or concrete is

the pipe and the bottom of the aggregate base for all pressure and on-pressure piping installed under asphaltic concrete paving. Routing of irrigation lines as indicated on the Drawings is diagrammatic. Install lines (and various assemblies) in such a manner as to conform with the details. Install no multiple assemblies in plastic lines. Provide each assembly Install all assemblies specified herein in accordance with respective details. In absence of detail Drawings or Specifications pertaining to specific items required to complete the Work, perform such Work in accordance with best standard practice with prior approval of the Landscape Architect. Clean all PVC pipe and fittings before installation. Installation and solvent welding methods shall be as recommended by the pipe and fitting manufacturer. On PVC to metal connections, work the metal connections first. Use teflon tape, or approved equal, on all threaded PVC, and on all threaded PVC to metal ioints. Where threaded PVC connections are required, use threaded PVC adapters into which the pipe may be welded.

Architect. No hydraulic driving will be permitted under concrete paving.

necessary, it shall be done and replaced by the Contractor as a part of the Contract cost.

Obtain permission to cut or break sidewalks and/or concrete from the Landscape

Provide for a minimum cover of eighteen (18) inches between the top of

028100 - 9 028100 - 12

END OF SECTION 028100

Las Canoas Water

Line Clearance: All lines shall have a minimum clearance of six (6) inches from each

Automatic Controller: Install per manufacturer's instructions. Connect remote

120-volt stub-out to controller locations will be provided by electrical

All electrical Work must conform to local codes, ordinances and union

Install where shown on Drawings and details. When grouped together,

Burn valve number onto lid of valve box with branding iron manufactured

Install the sprinkler heads as designated. Sprinkler heads to be

Install drip emitters only after flushing of the system has been

Bring drip emitters to the soil surface with transfer tubing attached with a

barb fitting to buried polyethylene tubing. Surface mount and stake emitters with

transfer tubing stake. Install a bug cap at the end of each transfer tubing line. Locate

emitters equally spaced around the plant at the edge of the rootball or as shown in the

The Owner reserves the right to make temporary repairs as necessary to keep the

Where it is necessary to excavate adjacent to existing trees and shrubs, use all

028100 - 10

irrigation system equipment in operating condition. The exercise of this right by the Owner

possible care to avoid injury to trees, tree roots and shrubs. Excavate by hand only in areas

where two (2) inch and larger roots occur. Tunnel under all roots two (2) inches and larger in

diameter. Wrap roots in heavy burlap to prevent scarring or excessive drying. Where a ditching machine is run close to trees having roots smaller than two (2) inches in diameter, hand trim the wall of the trench adjacent to the tree, making clean cuts through. Paint roots one (1) inch and

larger in diameter with two (2) coats of tree paint. Close trenches adjacent to tree within

the tree with burlap or canvas. Excavations within the driplines of existing Oak trees shall be

performed under the supervision of the project Arborist.

may also include changes in emitter sizes as required.

pounds per square inch and prove watertight prior to paving.

it has been duly inspected, tested, and approved.

develop, replace joints and repeat test until entire system is proven watertight.

Architect or other duly-authorized representative of the Owner. Do not backfill pipe until

Furnish force pump and all other necessary test equipment.

presence of the Landscape Architect to determine if the water coverage for planting

areas is complete and adequate. Furnish all materials and perform all Work required to

correct any inadequacies of coverage due to deviations from Drawings, or after bringing

this to the attention of the Landscape Architect. This test shall be accomplished before

The entire irrigation system, with the exception of drip tubing and emitters, must be

Clean-up as each portion of Work progresses. Remove refuse and excess dirt from

Operate each system in its entirety for the Landscape Architect at time of final

Show evidence to the Landscape Architect that the Owner has received all

Notify the Landscape Architect in advance for the following observation meetings.

Pressure supply line installation and testing: 48 hours

When observations have been conducted by other than the Landscape Architect,

No site observations will commence without record drawings. In the event that the

Contractor calls for a site visit without record drawings, without completing previously noted

reimbursing the Owner for the Landscape Architect's time for the site visit at his current billing

rates per hour portal to portal (plus transportation costs) for inconvenience. No further site

corrections, or without preparing the system for said visit, he shall be responsible for

Automatic controller installation: 48 hours

Lateral line and emitter installation: 48 hours

observation. Rework any items deemed not acceptable by the Landscape Architect to the

accessories, charts, record drawings, and equipment as required before final observation can

Pre-Job conference: 7 days

Coverage test: 48 hours

Final inspection: 7 days.

visits will be scheduled until this charge has been paid and received.

Control wire installation: 48 hours

show evidence in writing of when and by whom these observations were made.

the site, sweep all walks and paving clean, and repair any damage done to the Work of others

Adjustment of the System:

Testing of Irrigation System:

square inch and prove watertight.

system to meet site requirements.

under full automatic operation prior to any planting.

0.7 MAINTENANCE

0.8 CLEAN-UP

Las Canoas Water

to original conditions

0.10 OBSERVATION SCHEDULE

according to the time indicated:

0.9 FINAL OBSERVATION PRIOR TO ACCEPTANCE

complete satisfaction of the Landscape Architect.

of electrical control valves.

forty-eight (48) hours in advance of testing.

twenty-four (24) hours, and where this is not possible, shade the side of the trench adjacent to

If it is determined that adjustments in the irrigation equipment will provide

Request the presence of the Landscape Architect in writing at least

Testing of pressure mainlines shall occur prior to installation

Test all pressure lines under hydrostatic pressure of 150 pounds per

Test all piping under paved areas under hydrostatic pressure of 150

Sustain pressure in lines for not less than two (2) hours. If leaks

Make all hydrostatic tests only in the presence of the Landscape

When the irrigation system is completed, perform a coverage test in the

Upon completion of each phase of Work, test and adjust the entire

028100 - 11

proper and more effective coverage, make adjustments prior to planting. Adjustments

shall not relieve the Contractor of responsibility under the Contract Documents.

Do not exceed the maximum spacing of heads indicated. In no case

Provide the 120-volt power connection to the automatic controller.

allow at least twelve (12) inches between valves. Install each remote control valve in a

separate valve box. Label each controller and station number at the valve with a 2-1/4"

x 2-3/4" polyurethane I.D. tag attached to the control wire of the valve.

installed in this Work shall be equivalent in all respects to those specified.

shall the spacing exceed the maximum recommended by the manufacturer.

accomplished to the satisfaction of the Landscape Architect

other and from lines of other trades. Parallel lines shall not be installed directly over one

control valves to controller in numerical sequence as shown on the Drawings.

Line Voltage Wiring for Automatic Controller:

authorities having jurisdiction.

Remote Control Valves:

for the purpose.

Sprinkler Heads

Drip Emitters:

detail Drawings.

0.4 TEMPORARY REPAIRS

Las Canoas Water

0.6 FIELD QUALITY CONTROL

0.5 EXISTING TREES AND SHRUBS

802 EAST COTA STREET, SUITE A SANTA BARBARA, CA 93103 TEL (805) 963-1955

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LANDSCAPE ARCHITECT ARCADIA STUDIO, INC. 202 East Cota Street Santa Barbara, CA 93101 TEL (805) 962-9055

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MECHANICALCAL ENGINEER MECHANICAL ENGINEERING CONSULTANTS, INC. 1616 Anacapa Street Santa Barbara, CA 93101 TEL (805) 957-4632

FIRE PROTECTION ENGINEER COLLINGS & ASSOCIATES, INC. 260 Maple Court, Suite 241 Ventura, CA 93001 TEL (805) 658-0003

ELECTRICAL ENGINEER ALAN NOELLE ENGINEERING 1616 Anacapa Street Santa Barbara, CA 93101 TEL (805) 563-5444

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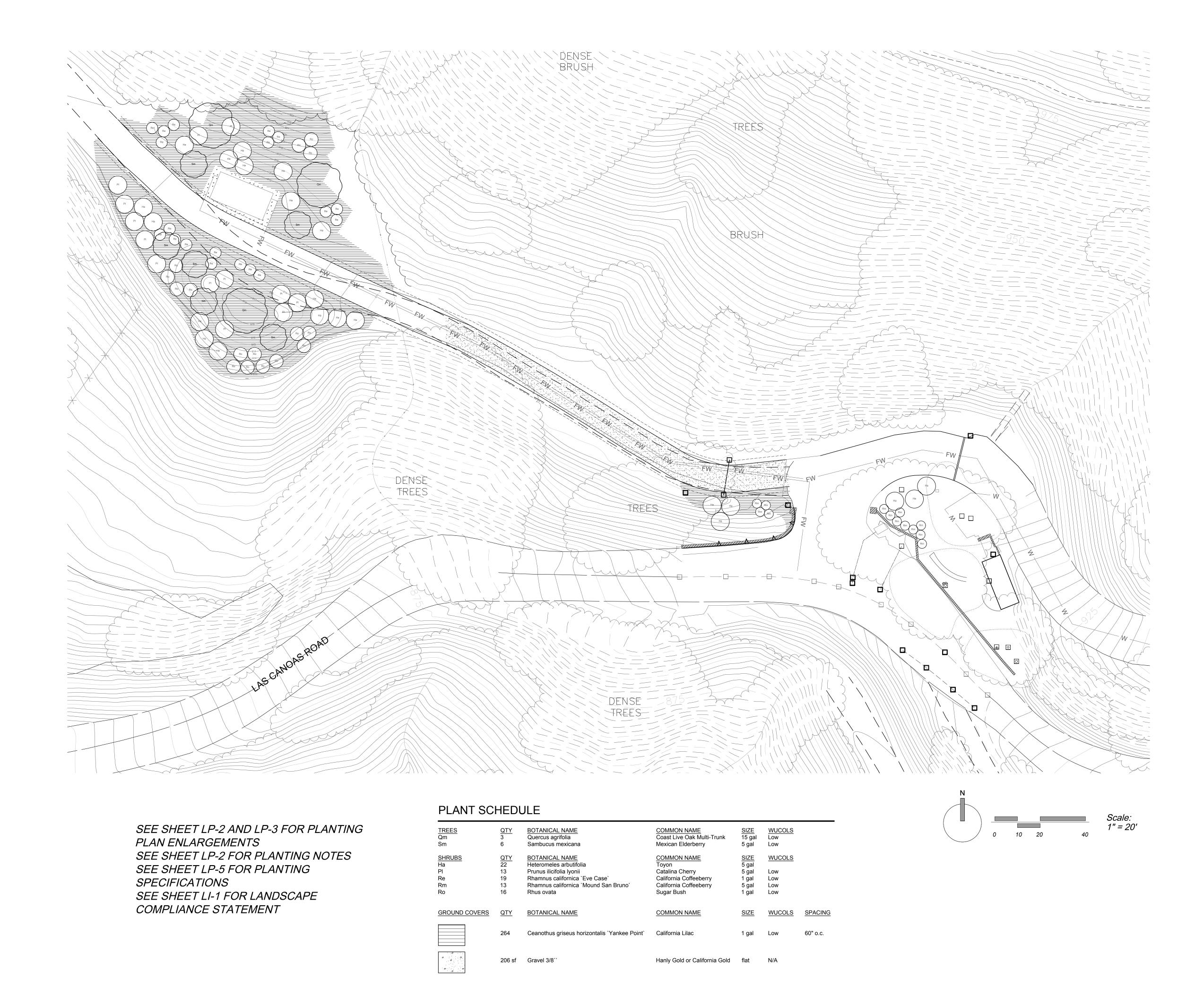
1964 LAS CANOAS ROAD SANTA BARBARA, CA 93105

SHEET TITLE

IRRIGATION **SPECIFICATIONS**

DRAWN BY: QP JOB NUMBER: 18045.04 SHEET NO.





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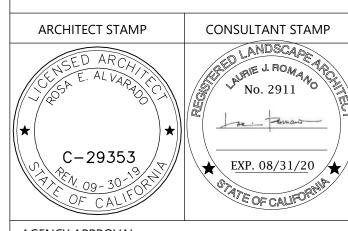
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DALLAS, TX 75201

WATER UTILITIES IMPROVEMENTS

1964 LAS CANOAS ROAD SANTA BARBARA, CA 93105

SHEET TITLE

PLANTING PLAN

DRAWN BY: QP JOB NUMBER: 18045.04

LP-1

25. In areas with significant gopher populations that can not be controlled through traps or other conventional methods, all plant material is to be placed in an appropriately sized gopher basket. Contractor to include cost of baskets and wire in all bids and planting estimates.

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No. 2911

me. Tomano

EXP. 08/31/20

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REVERE CAPITAL, LLC 2301 CEDAR SPRINGS RD, SUITE 200 DALLAS, TX 75201

WATER UTILITIES IMPROVEMENTS

1964 LAS CANOAS ROAD SANTA BARBARA, CA 93105

PLANTING ENLARGEMENT WEST

JOB NUMBER: 18045.04 DRAWN BY: QP

LP-2

DATE: JANUARY 17, 2020

Planting Notes: 1. All plants are identified by typical symbols. Plant quantities are approximate and provided for the contractor's convenience. In the event of discrepancies in plant count, quantities indicated by plant symbols on the plan prevail. 2. At completion of rough grading, take representative soil samples (minimum of two per acre) from the project site and source of any imported topsoil. Locations and number of soil samples must be approved by the Landscape Architect. Send soil samples to Wallace Soil Testing Laboratory 310-615-0116 or an approved equal for testing of suitability for ornamental planting as specified on the drawings. Submit a copy of the results of this analysis to the Landscape Architect for approval and comment. Make adjustments to the rate and analysis of fertilizer & amendments as recommended to provide a suitable medium for planting. Follow all recommendations in agronomic soil report, including leaching if recommended. Notify the Landscape Architect of any potential problems which may result due to harmful substances found in the soil. Failure to act as specified may result in contractor assuming financial responsibility for any damage to plants. 3. Specification Section 032 93 00, Landscape Planting, is integral to the intent of the planting plan. Do not bid planting plan without reference to applicable specification section. 4. Contractor is responsible for finish grades and for fine grading required for surface drainage and uniformity to the satisfaction of the Landscape Architect. Advise Landscape Architect of drainage problems and make recommendations for solution. Final grades to within a tenth of a foot must be established prior to commencing planting operations. Grades and flow lines must be maintained during irrigation and planting operations. Contractor may not alter established grade and flow lines without the knowledge and permission of the Landscape Architect. 6. Install North American Green SC150BN Erosion Control Fabric (Pacific Soil Stabilization Santa Maria, CA 93454 PH (800) 473-1965) on all slopes of 5:1 or steeper, per manufacturer's specification. 7. The Landscape Architect reserves the right to review all plant material at the nursery prior to delivery to job site. In lieu of nursery review the Landscape Architect may request photos and/or specifications of plant material to be provided prior to delivery. 8. Landscape Architect reserves the right to refuse plants delivered to site that are substandard. Replacement plants are to be supplied by contractor at no additional cost to owner. 9. Plant materials and installation to meet highest quality industry standard. Locate and secure all specified plants within two weeks of award of contract and show proof of to Landscape Architect in writing that plants have been secured. Notify Landscape Architect immediately of any plant sourcing difficulty. 10. Guaranty plant material 5 gallon or smaller except transplants for a period of 90 days from date of final review. Replace dead plants and plants not in vigorous condition, without cost to owner, as determined by Landscape Architect at the end of warranty period. Guaranty 15 gallon plants and larger, for 1 year from date of final review. 11. Notify Landscape Architect of intended planting schedule a minimum of two weeks prior to 12. Set out all plant materials as shown on plan. Final locations must be approved by the Landscape Architect prior to planting. 13. Plant crown to be 2" above adjacent grade for 15 gallon and larger plants; 1" above adjacent grade or plants smaller than 15 gallon. 14. Install all plants per details. 15. Stake trees according to industry standards per details. Review with Landscape Architect prior to work. 16. Contact Landscape Architect for decision regarding proposed plant substitutions 4 weeks prior to installation. 17. All plants delivered to the site must have legible identification tags. 18. Any tree shown on plan to be installed in less than 8' (eight feet) clear distance from any curb, walkway, foundation, domestic water line, fire line, storm drain, or sewer line, or any underground utility is to be installed with root control barriers UB 24-2 by Deep Root Corp: 800-458-7668. Install a minimum of 16 linear feet of root barrier centered on the tree adjacent to any underground utility. Install as directed by detail. Install per manufacturer's instructions. Palm trees do not require root control barriers. Landscape Architect may alter or waive requirement. 19. Plant groundcovers adjacent to shrubs and/ or trees 1.5 times the distance of their specified spacing away from the stems of the adjacent shrubs and trees. Groundcovers adjacent to curbs and pavement shall be spaced at specified spacing away from paved areas. 20. Plant backfill: See Specifications 21. Completely eradicate all bermuda, kikuyu grass, and other weed growth or other visible or alleged invasive weeds from areas within project limits prior to installing planting. 22. Provide and install bark mulch over all shrub and groundcover areas. Use walk-on bark mulch. Walk on Bark mulch shall be a virgin forest product consisting of shredded fir bark and bark nuggets. Source from Agromin (800) 247-6646 or as listed in the specifications. Spread mulch evenly over all shrub and groundcover areas to a depth of 3" (three inches). Keep mulch away from plant stems. Submit mulch samples to Landscape Architect for approval prior to purchase and delivery. 23. Preserve and protect all existing trees unless otherwise noted. 24. Any tree or plant containing pathogens, bacteria or viruses harmful to plant health shall be replaced at the Contractor's expense.

TREES Qm Sm	QTY 3 6	BOTANICAL NAME Quercus agrifolia Sambucus mexicana	COMMON NAME Coast Live Oak Multi-Trunk Mexican Elderberry	<u>SIZE</u> 15 gal 5 gal	WUCOLS Low Low	
SHRUBS Ha PI Re Ro	QTY 16 13 19 16	BOTANICAL NAME Heteromeles arbutifolia Prunus ilicifolia lyonii Rhamnus californica `Eve Case` Rhus ovata	COMMON NAME Toyon Catalina Cherry California Coffeeberry Sugar Bush	<u>SIZE</u> 5 gal 5 gal 1 gal 1 gal	WUCOLS Low Low Low	
GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	SPACING
	250	Ceanothus griseus horizontalis 'Yankee Point'	California Lilac	1 gal	Low	60" o.c.
	206 sf	Gravel 3/8``	Hanly Gold or California Gold	flat	N/A	



NATIVE SHRUB Heteromeles arbutifolia / Toyon NATIVE GROUNDCOVER Ceanothus 'Yankee Point' / California Lilac EXISTING NATIVE TREES TO BE PROTECTED

Quercus agrifolia / Coast Live Oak NATIVE SHRUB Rhamnus californica 'Mound San Bruno' / Coffeeberry SEE SHEET LP-2 AND LP-3 FOR PLANTING PLAN ENLARGEMENTS SEE SHEET LP-2 FOR PLANTING NOTES SEE SHEET LP-5 FOR PLANTING PLANT SCHEDULE DRIVEWAY ENTRY SPECIFICATIONS SEE SHEET L1-1 FOR LANDSCAPE BOTANICAL NAME
Heteromeles arbutifolia

COMPLIANCE STATEMENT

SIZE WUCOLS SPACING

Rhamnus californica 'Mound San Bruno'

14 Ceanothus griseus horizontalis 'Yankee Point' California Lilac

GROUND COVERS QTY BOTANICAL NAME

802 EAST COTA STREET, SUITE A SANTA BARBARA, CA 93103 TEL (805) 963-1955

CONSULTANTS

PLANNER SUZANNE ELLEDGE PLANNING & PERMITTING SERVICES 1625 State Street Santa Barbara, CA 93101

<u>CIVIL ENGINEER</u> FLOWERS & ASSOCIATES, INC. 201 N. Calle Cesar Chavez, Suite 100 Santa Barbara, CA 93103 TEL (805) 966-2224

LANDSCAPE ARCHITECT ARCADIA STUDIO, INC. 202 East Cota Street Santa Barbara, CA 93101 TEL (805) 962-9055

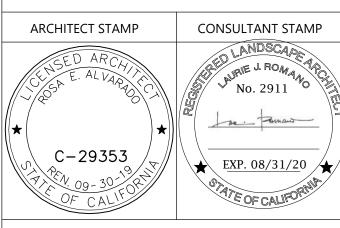
TEL (805) 966-2758

STRUCTURAL ENGINEER GREER STRUCTURAL ENGINEERING 971 Cheltenham Road Santa Barbara, CA 93105 TEL (805) 452-3031

MECHANICALCAL ENGINEER MECHANICAL ENGINEERING CONSULTANTS, INC. 1616 Anacapa Street Santa Barbara, CA 93101 TEL (805) 957-4632

FIRE PROTECTION ENGINEER COLLINGS & ASSOCIATES, INC. 260 Maple Court, Suite 241 Ventura, CA 93001 TEL (805) 658-0003

ELECTRICAL ENGINEER ALAN NOELLE ENGINEERING 1616 Anacapa Street Santa Barbara, CA 93101 TEL (805) 563-5444



AGENCY APPROVAL

REVISION	S	
NO.	DATE	DESCRIPTION

THE ARCHITECT DOES NOT REPRESENT THAT THESE PLANS OR THE SPECIFICATIONS ARE SUITABLE FOR ANY SITE OTHER THAN THE ONE FOR WHICH THEY WERE SPECIFICALLY PREPARED. THE ARCHITECT DISCLAIMS RESPONSIBILITY FOR THESE PLANS AND SPECIFICATIONS IF THEY ARE USED IN WHOLE OR IN PART AT ANY OTHER SITE

PROJECT OWNER & TITLE

REVERE CAPITAL, LLC 2301 CEDAR SPRINGS RD, SUITE 200 DALLAS, TX 75201

WATER UTILITIES **IMPROVEMENTS**

1964 LAS CANOAS ROAD SANTA BARBARA, CA 93105

PLANTING **ENLARGEMENT** EAST

JOB NUMBER: 18045.04 DRAWN BY: QP

LP-3

Las Canoas Water

SECTION 029000 - LANDSCAPE PLANTING

Tri-C Myco Paks (Tri-C Enterprises: 1-800-927-3311 tric@earthlink.net).

F. Imported Topsoil: Fertile, friable, natural topsoil of character and texture similar to the project

site soil; without admixture of subsoil material, obtained from a well-drained arable site,

reasonably free from clay, lumps, coarse sands, stones, plants, roots, sticks, and other foreign

materials, with an acidity range of between pH 5.8 and 8.2. The sodium absorption ratio (SAF

shall not exceed 6 and the electrical conductivity (Ece) of the saturation extract of this soil shall

not exceed 3.0 millimhos per centimeter at 25 degrees centigrade. The boron content shall be

no greater than 1 part per million as measured on the saturation extract. In order to insure

conformance, samples of the imported soil shall be submitted to an approved laboratory for

029000 - 3

Superthrive vitamin hormone supplement

analysis prior to, and following, backfilling.

G. Plant Material

Landscape Planting

sound, healthy, vigorous and free of insect infestations, plant diseases, sunscalds, fresh abrasions of the bark, excessive abrasions, or other objectionable disfigurements. Trees 3.1 INSPECTION PART 1 - GENERAL shall have sturdy trunks shall have well hardened and vigorous, fibrous root systems which are not root- or pot-bound. In case the sample plants are found to be defective, the A. Obtain certification that final grades to within .10' have been established prior to commencing Landscape Architect reserves the right to reject the entire lot or lots of plants represented planting operations. Provide for inclusion of all amendments, settling, etc. Contractor shall be 1.1 RELATED DOCUMENTS by the defective samples. The Landscape Architect is the sole judge of acceptability. Any responsible for shaping all planting areas as indicated on plans or as directed by the Landscape defective plants unsuitable for planting will be considered as samples provided at the expense of the Contractor. A. Drawings and general provisions of the Contract, including the Project Conditions of Approval, 2. The size of the plants will correspond with that normally expected for species and variety of B. Inspect trees, shrubs and liner stock for injury, insect infestation and trees and shrubs for General and Supplementary Conditions and other Division 1 Specification Sections, apply to commercially available nursery stock or as specified on Drawings. The minimum acceptable size of all plants measured before pruning with the branches in normal position. shall conform with the measurements, if any, specified on the Drawings in the list of plants C. Do not begin planting until deficiencies are corrected or unacceptable plants replaced. to be furnished. Plants larger in size than Specified may be used with the approval of the 1.2 SUMMARY Landscape Architect, but the use of larger plants will make no change in the Contract price. All plants not conforming to the requirements herein Specified shall be considered A. Furnish all labor, materials and equipment necessary to provide and install all trees, plants and 3.2 PREPARATION defective. Such plants, whether in place or not, shall be marked as rejected and groundcovers as shown on the Drawings. The Contractor's work shall include: immediately removed from the site of work and replaced with new plants at the A. Soil preparation Contractor's expense. The plants shall be of the species, variety, size and condition Prepare soil for planting and furnish all soil amendments. Specified herein or as shown on the Drawings. Under no condition will there be any Furnish and install all plant materials per the planting plan After approximate finished grades have been established, rip the soil to a depth of 12 substitutions of plants or sizes listed on the accompanying plans, except with the inches. Incorporate the following amendments (per 1,000 square feet)into the top 6 inches Prune plants as required. expressed consent of the Landscape Architect. Stake, tie and guy plant materials as specified. (Application Rates are for base bid, modify per soils analysis): Pruning: At no time shall trees or plant materials be pruned, trimmed or topped prior to Dispose of trash, debris and surplus materials. TRI-C Humate Plus 75 pounds per 1,000 square feet delivery. Any alteration of their shape shall be conducted only with the approval and when Maintain the planting until such time as the project has been accepted. Agricultural gypsum - 50 lbs. in the presence of the Landscape Architect. 4 cubic yards organic amendment (composi Guarantee plant material smaller than 15 gallon for a period of 90 days to commence at Plant material shall be true to botanical and common name and variety as Specified in the final acceptance of project. Guarantee plant material 15 gallon or larger for a period of one Leach soil as necessary to bring SAR to below 3.0. latest edition of "Annotated Checklist of Woody Ornamental Plants in California, Oregon At the time of planting, the top two inches of all areas to be planted shall be free of stones, year to commence at final acceptance of project. and Washington", published by the University of California School of Agriculture. stumps, or other deleterious matter 1" in diameter or larger, and shall be free from all wire, Nursery Grown and Collected Stock B. Related Sections include the following: plaster or similar objects that would hinder to planting or maintenance. Grown under climatic conditions similar to those in locality of project. Division 2 Section "Irrigation System" B. Final Grades Container-grown stock in vigorous, healthy condition, not root-bound or with root system hardened off. C. Definition: The words Landscape Architect as used herein refer to the Owner's authorized Minor modifications to grade may be required to establish the final grade. c. Use only flatted or liner stock plant material which is well established in removable Finish grading shall insure proper drainage of the site as depicted on the Civil Engineer's containers or formed homogeneous soil sections. All areas shall be graded so that the final grades will be 1" below adjacent paved areas, 7. Substitute plant material will not be permitted unless specifically approved in writing by the 1.3 QUALITY ASSURANCE sidewalks, valve boxes, headers, clean-outs, drains, manholes, etc., or as indicated on Landscape Architect. Surface drainage shall be away from all building foundations. A. Source Quality Control H. Backfill Mix Eliminate erosion scars prior to commencing maintenance period. Submit documentation to Landscape Architect within fifteen (15) days after award of Backfill all planting holes except palms with the following mix (rates are per cubic yard of C. Pre-Planting Weed Control Contract that all plant material is secured for the project. Contractor is responsible for all amended soil): material listed on the plant list. Any and all substitutions due to unavailability must be After irrigation system is operational, apply water for five (5) to ten (10) consecutive days equested in writing prior to confirmation of ordering. Tri-C 6-2-4 w/5% Sulfur 7 pounds per cubic yard of amended soil. as needed, to achieve weed germination. If live perennial weeds are present, spray with a Plants are subject to approval of Landscape Architect at place of growth or upon deliver Agricultural gypsum - 4 pounds or as recommended by soil testing laboratory. for conformity to Specifications. Such approval will not impair the right of review and non-selective systemic contact herbicide, recommended and applied by an approved Organic amendment/ Compost: 15% by volume. rejection during progress of the work. Submit written request for review of plants at place licensed landscape pest control advisor and applicator. Leave sprayed plants intact for at Tri – C Myco Pak at the following rates: least fifteen (15) days to allow systemic kill. Repeat as needed to eliminate perennial of growth to Landscape Architect. State the place of growth and quantity of plants to be Plant size Rate of application in ounces per plant eviewed. Landscape Architect reserves the right to refuse review at this time, if in his Flatted 1-2 ml (pinch)of granular ENDO 120 Clear and remove dead weeds least 1/4" below the surface of the soil over the entire area judgment, a sufficient quantity of the plants is not available. 1 gallon 2 gallon to be planted. Maintain site weed-free utilizing mechanical and chemical treatment until final acceptance 5 gallon 15 gallon 2-3 packs 7 packs Landscape Planting 029000 - 1 Landscape Planting 029000 - 4 Landscape Planting 029000 - 7 Las Canoas Water Las Canoas Water Las Canoas Water 1.4 PRODUCT DELIVERY, STORAGE AND HANDLING 4. After irrigation system is operational, apply water for five (5) to ten (10) consecutive days as needed, to achieve weed germination. Apply contact herbicides and wait, as needed, A. Delivery: 42", 48" box 21 packs before planting. Repeat as required. 26 packs Installation of Imported Topsoil: Provide and install imported topsoil mix in all raised planters to 1. Deliver fertilizer to site in original unopened containers bearing manufacturer's guaranteed 32 packs a finish grade of 2" below the top of the planter. Allow for settling. Refer to drawings for depth chemical analysis, name, trademark, and conformance to State Law. Furnish Landscape Architect with copies of receipts for all amendments Specified in Backfill field-grown palms with washed plaster sand tamped firm. Over excavate hole as Section 2.01 - Materials. required to stabilize palms. Deliver all plants with legible identification labels. Use durable waterproof labels with E. Disposal of Excess Soil: Dispose of any unacceptable or excess soil at an offsite location water-resistant ink which will remain legible for at least sixty (60) days. I. Stormwater BMP Planter Box and Bioretention Areas Planter Mix approved by Owner. Protect plant material during delivery to prevent damage to root ball or desiccation of Notify the Landscape Architect seven (7) days in advance of delivery of all plant materials 3.3 PLANTING INSTALLATION: Backfill the planter box and bioretention planters with a planter mix consisting of 60 to 70% and submit an itemized list of the plants in each delivery. sand, 15 to 25% compost, and 10 to 20% clean topsoil. The organic content of the soil nixture shall be 8% to 12%; the pH range shall be 5.5 to 7.5. B. Storage: The planting media placed in the cell shall be highly permeable and high in organic matter (e.g., loamy sand mixed thoroughly with compost amendment) and a surface mulch layer Plant when weather and soil conditions are suitable and in accordance with locally Store plant material in shade and protect from weather. Sand shall be free of stones, stumps, roots or other similar objects larger than 5 Maintain and protect plant material in a healthy, vigorous condition at all times. Place only as many plants as can be installed and watered on that same day millimeters, and have the following gradation. Open containers and remove plants to maintain the integrity of the ball of earth surrou C. Handling: Exercise care in handling, loading, unloading and storing of plant materials. Plant Particle size (ASTM D422) the roots. Plant and water immediately after removal from the containers. Do not open materials that have been damaged in any way will be discarded. If installed, such plants will be containers prior to placing the plants in the planting area. replaced with undamaged materials at the Contractor's expense. B. Lay-out of Major Plantings: Landscape Architect must approve layout of all containerized plants in their containers before any plant pits are dug. If any underground construction or utility lines 1.5 JOB CONDITIONS are encountered in the excavation of planting areas, other locations for planting may be selected by the Landscape Architect. It is the Contractor's responsibility to confirm the location A. Site Conditions and depth of all underground utilities and obstructions. Refer to Engineer's plans. 4. Compost shall be free of stones, stumps, roots, or other similar objects larger than 3/4". It shall have a particle size of 98% passing through a ¾" screen or smaller, and meet the Verify the locations of underground utilities prior to excavation. Repair damage to any C. Planting of Trees and Shrubs such utilities resulting from the Contractor's work at Contractor's expense. Soluble Salt Concentration <10mmhos/cm (dS/m) Investigate the site for any subsurface drainage or unusual soil conditions which might Excavation for planting shall include the stripping and stacking of all acceptable topsoil prove detrimental to the success of the design. Should any such condition exist, notify the encountered within the areas to be excavated for trenches, tree holes, plant pits, and Moisture: 30-60% dry weight basis Landscape Architect and submit a proposal for corrective measures and their cost. Should Stability (Carbon Dioxide evolution rate): >80% relative to positive control planting beds. the contractor fail to provide such notification, he will be held solely responsible for any All excavated holes shall have vertical sides with roughened surfaces and shall be of a size Maturity (seed emergence and seedling vigor): >80% relative to positive control corrections deemed necessary by the Owner and the Landscape Architect should damage that is twice the diameter and equal to the depth of the root ball for all trees and shrubs. Physical contaminants: <1% dry weight basis Install plant with top of rootball 1" above adjacent grade Protect all planting areas from excessive compaction when trucking plants or other material Topsoil shall be free of stones, stumps, roots, or other similar objects larger than 2 inches B. Field Conditions to the planting site. and have the following characteristics: 4. Remove excess soil generated from the planting holes and not used as backfill or in 1. The planting plan is diagrammatic. Scaled dimensions are approximate. Prior to Soluble salts:< 4.0 mmhos/cm (dS/m) establishing the final grades. proceeding with installation work, verify all dimensions with field conditions and notify the 5. Can Removal: after removing plant, superficially cut edge roots with knife on three (3) pH range: 5.5 to 7.0 Landscape Architect of any deviation on the plan. Landscape Architect is the final Organic matter:>5% sides and bottom. authority in interpretation of the plan and in accommodation of unforeseen field conditions. Box Removal: Carbon to nitrogen ration<20:1 Remove bottom of plant boxes before planting. Moisture content: 25-55% Remove sides of box without damage to root ball after positioning plant and partly PART 2 - PRODUCTS % Passing Particle size Center plant in pit or trench. (ASTM D422, D1140) Face plants with fullest growth into prevailing wind. Set plant plumb and hold rigidly in position until soil has been tamped firmly around ball or 2.1 MATERIALS Sand (0.05-2.0 mm) Silt(0.002 – 0.05 mm) A. The following soil amendments and fertilizers are to be used for bid price basis. 10. After the plant has been placed, add backfill to the hole to cover approximately one-half (1/2) of the height of the root ball. Water to thoroughly saturate the root ball and adjacent 6. The planter box shall be covered with mulch when constructed and annually replace to B. All materials shall be of standard, approved and first-grade quality and in prime condition when maintain adequate mulch depth. Mulch shall be: Plant Pacs installed and accepted. Deliver any commercially processed or packaged material to the site in 029000 - 2 Landscape Planting 029000 - 5 Landscape Planting 029000 - 8 Landscape Planting Las Canoas Water Las Canoas Water Las Canoas Water the original unopened container bearing the manufacturer's guaranteed analysis. Supply the Well-aged, shredded or chipped woody debris or plant material. Well-aged mulch a. After the water has completely drained, place Tri-C Myco Paks at the following Landscape Architect with samples of all supplied materials accompanied by analytical data from is defined as mulch that has been stockpiled or stored for at least twelve (12) an approved laboratory source illustrating compliance or bearing the manufacturer's guaranteed months. Compost meeting the requirements above may also be used: Free of weed seeds, soil, roots, and other material that is not bole or branch wood Rate of application in ounces per plant 1-2 ml (pinch)of granular ENDO 120 C. "All Around Compost" from All Around Irrigation (805-684-3115), "Compost" from Agromin Mulch depth shall be 2 to 3 inches thick. Planter box or bioretention area soil mix shall be tested and meet the following Horticultural Products (1-800-AGROMIN) "Valley Compost" through Santa Barbara Stone: 2-3 packs 1. Compost derived from processed organic materials consisting of chipped, shredded, or ASTM D4972 ground recycled wood products, greenwaste, and biosolids mixed and composted Minimum 32 ppm Set planting tablets with each plant on the top of the root ball while the plants are according to US EPA, 40 CFR, part 503 Phosporus (Phosphate | Not to exceed 69 ppm still in their containers so the required number of tablets to be used in each hole 0.56% to 0.84% N based on dry weight. – P₂ O₅) can be easily verified by the Landscape Architect. Particle Size: Minumum 78 ppm a. 95% - 100% passing 6.35 mm standard sieve Not to exceed 500 ppm Raise all plants which settle deeper than the surrounding grade to the correct level. 80% - 100% passing 2.33 mm standard sieve Should the pH fall outside of the acceptable range, it may be modified with lime (to Fill the remainder of the hole with backfill mix and tamp firm. 4. Salinity: The saturation extract conductivity shall not exceed 3.0 millimhos/centimeter at 25 raise) or iron sulfate plus sulfur (to lower). The lime or iron sulfate must be mixed After backfilling, construct an earthen basin around each plant. Each basin shall be of a degrees centigrade as determined by saturation extract method. uniformly into the soil mix prior to use in the planter boxes or bioretention mix. depth sufficient to hold at least two (2) inches of water. The basins shall be constructed of Iron content: Minimum 0.08% dilute acid soluble Fe on dry weight basis. Should the soil mix not meet the minium requirement for potassium, it may be amended backfill materials. Remove basin in all turf areas after initial watering. Add 10 Organic Content: Minimum 92% based on dry weight and determined by ash method. modified with potash. Magnesium sulfate and potash must be mixed uniformly into drops Superthrive to each 1 gallon of water at the following rates Dark brown to black in color, not malodorus. the soil mix prior to use in planter boxes or bioretention mix. Shall contain no paint, petroleum products, herbicides, fungicides, or other chemical Limestone shall contain not less than 85% calcium and magnesium carbonates. 1 quart per each plant from flats residues that would be harmful to plant or animal life. Inert contaminants such as glass, Dolomitic (magnesium) limestone shall contain at least 10 percent magnesium as 1 gallon per 1 gallon plant plastic, wood, metal dirt, or rocks shall not exceed 0.1 % magnesium oxide and 85 percent calcium and magnesium carbonates. Limestone 3 gallons per 5 gallon plant shall conform to the following gradation: 5 gallons per 15 gallon plant Minimum Percent Passing by Weight 10 gallons per 24" box D. Soil Amendments 20 gallons per 30" box g. 30 gallons per 36" box 1. Soil sulfur: Agricultural grade sulfur containing a minimum of 99% sulfur (expressed as 15. Pruning: Limit pruning to the minimum necessary to remove injured twigs and branches. g. Iron sulfate shall be a constituent of an approved horticultural product produced as Iron sulfate: 20% Iron (expressed as metallic iron), derived from ferric and ferrous sulfate, and the shape the plant material as directed by the Landscape Architect. Pruning may not a fertilizer for supplying iron and as a soil acidifier. 10% sulfur (expressed as elemental) Magnesium sulfate shall be a constituent of an approved horticultural product be done prior to delivery of plants. Cuts over 3/4" in diameter shall be painted with tree Calcium Carbonate: 95% lime as derived from oyster shells. Gypsum: Agricultural grade product containing 98% minimum calcium sulfate. 16. Staking and Guying: Stake trees only if directed to do so by the Landscape Architect. Potash shall be a constituent of an approved horticultural product produced as a Zinc: Agricultural grade zinc sulfate (36% elemental zinc). Complete staking of all trees immediately after planting. Install all stakes plumb and as Complete Green PAM 'Soil Drain' (365 Coral Circle, El Segundo, CA 90245, 310-615indicated in details. Allow for staking of all trees, providing unit price, and credit Owner for 0116): soil aggregating polymer. all trees not staked. J. Guying and Staking Materials: Install per plant list. D. Planting of Groundcovers: Wood tree stakes: Lodge pole pine, fully treated with Coppernapthanate Wood 1. Planting fertilizer: Tri-C 6-2-4 w/5% S (Tri-C Enterprises: 1-800-927-3311 info@tri-Groundcover plants shall be grown in flats as indicated on the plans. Leave flat-grown Preservative in strict accordance with Federal Spec. TT-W-572 Type 1 Composition B, 2" plants in those flats until transplanting. Keep the flat's soil moist so that it will not fall apart (min. nominal size) diameter x 10 ft. long (12 ft. long for 24" box size trees); no split stakes.

Duckbill Professional Tree Guying Systems: Foresight Products 1- 800- 325-5360

O. Deep Root Barrier: As manufactured by Deep Root Corp. (800-458-7668). Install per

029000 - 6

K. Headers: 2" x 4" Trex brand Saddle Brown color

M. Water: Furnished by Owner; transport as required

manufacturer's specifications.

Landscape Planting

L. Tree Paint: Morrison Tree Seal, Cabot Tree Paint, or equal

N. Mulch: Shredded bark, 0-1" ('Walk-On-Bark') sources per plan.

Las Canoas Water

1. In accordance with the California State Department of Agriculture's regulation for nursery

inspections, rules and rating. All plants shall have a normal habit of growth and shall be

Las Canoas Water

PART 3 - EXECUTION

when lifting the plants.

3.4 CLEAN-UP

Landscape Planting

Plant groundcover in straight rows and evenly spaced, unless otherwise noted, and at

intervals called out in the Drawings. Use triangular spacing unless otherwise noted on the

Exercise care at all times to protect the plants after planting. Repair any damage to plants

Sprinkle plants after planting until the entire hole is soaked to its full depth.

A. After all planting operations have been completed, remove all trash, excess soil, empty plant

containers, and rubbish from the property. Repair all scars, ruts or other marks in the ground

Las Canoas Water

2.1 MATERIALS caused by this work and leave the ground in a neat and orderly condition throughout the site. Pick up all trash resulting from this work no less frequently than each Friday before leaving the site, once a week, and/or the last working day of each week. Remove all trash from the site. A. All materials used must either conform to Landscape Planting Specifications in other sections or otherwise be acceptable to the Owner. Give the Owner monthly record of all herbicides, B. Leave the site area broom-clean and wash down all paved areas within the Contract area, insecticides and disease control chemicals used. eaving the premises in a clean condition. Leave all walks in a clean and safe condition. B. Tree/Shrub/Groundcover Fertilizer: Tri-C 6-2-4 w/5%S. 3.5 OBSERVATION SCHEDULE PART 3 - EXECUTION A. Notify the Landscape Architect in advance for the following site visits, according to the time 3.1 MAINTENANCE Plant material review: 48 hours A. Perform maintenance according to the following standards: Soil preparation and planting operations: 48 hours B. Keep all areas free of debris and weeded and cultivated at intervals of not more than ten (10) Final walk-through: 7 days. days. Include watering, edging, trimming, fertilization, spraying and pest control. B. When observations are conducted by someone other than the Landscape Architect, show C. Maintain adequate protection of the area. Repair damaged areas at the Contractor's expense. vidence in writing of when and by whom these reviews were made. C. No site visits will commence without all items noted in previous Observation Reports either 3.2 TREE AND SHRUB CARE completed or remedied unless such compliance has been waived by the Owner. Failure to accomplish punch list tasks or prepare adequately for desired inspections shall make the A. Watering: Maintain a large enough water basin around each plant so that enough water can be Contractor responsible for reimbursing the Owner for the Landscape Architect's time at his applied to establish moisture through the major root zone. current billing rates per hour (plus transportation costs). No further inspections shall be scheduled until this charge has been paid and received. END OF SECTION 029300 a. Prune trees to select and develop permanent scaffold branches that are smaller in diameter than the trunk or branch to which they are attached which have vertical spacing of from 18" to 48" and radial orientation so as not to overlay one another. to eliminate diseased or damaged growth; to eliminate narrow V-shaped branch forks that lack strength; to reduce toppling and wind damage by thinning out crowns; to maintain a natural appearance; to balance crown with roots. Under no circumstances will stripping of lower branches ("raising-up") of young trees be permitted. Lower branches shall be retained in a "tipped back" or pinched condition with as much foliage as possible to promote caliper trunk growth (tapered trunk). Lower branches may be cut flush with the trunk only after the tree is able to stand erect without staking or other support. Sucker growth may be removed if deemed appropriate by the Landscape Architect. c. Thin and shape evergreen trees when necessary to prevent wind and storm damage. Prune deciduous trees during the dormant season. Prune damaged trees or those that constitute health or safety hazards at any time of the year as required to eliminate these conditions. Shrubs: a. The objectives of shrub pruning are the same as for trees. Do not clip into balled or boxed forms unless required by the design and directed by the Landscape b. Make all pruning cuts to lateral branches or buds or flush with the trunk. Landscape Planting 029000 - 10 Landscape Maintenance 029390 - 3 Las Canoas Water Las Canoas Water Staking and Guying: Remove stakes and guys as soon as they are no longer SECTION 029390 - LANDSCAPE MAINTENANCE needed. Inspect stakes and guys to prevent girdling of trunks or branches and to prevent rubbing that causes bark wounds. Replace all broken stakes and ties with PART 1 - GENERAL specified materials. C. Weed Control: Keep basins and areas between plants free of weeds. Use recommended 1.1 RELATED DOCUMENTS legally approved herbicides. Avoid frequent soil cultivation that destroys shallow roots. A. Drawings and general provisions of the Contract, including the Project Conditions of Approval, Insect and Disease Control: Maintain a reasonable control with approved materials. General and Supplementary Conditions and other Division 1 Specification Sections, apply to E. Fertilization this Section. Apply fertilizer once each month during the maintenance period at the following rate per 1.2 SUMMARY 1,000 square feet of planting area. Top dress with Tri-C 6-2-4 w/5%S at 10-12 pounds per 1000 square feet. Avoid applying fertilizer to the root ball and base of main stem. Spread evenly under A. This Section includes the following: plant to drip line. After application, water thoroughly. 1. Furnish all labor, material, equipment and services required to maintain the landscape in an attractive condition as specified herein for a period of ninety (90) days. Replace dead, dying and missing plants and plants of a size, condition and variety B. Related Sections include the following: acceptable to Owner's authorized representative at Contractor's expense Division 2 Section "Irrigation System" Division 2 Section "Landscape Planting". 3.3 GROUNDCOVER CARE Definition: The words Landscape Architect as used herein shall refer to the Owner's authorized A. Weed Control: Control weeds, with chemical systemic spray or by mechanical means, so as to representative. cause minimal damage to planted materials. B. Watering: Water enough that moisture penetrates throughout root zone and only as frequently 1.3 QUALITY ASSURANCE as necessary to maintain healthy growth. A. Work force: Contractor's representative shall be experienced in landscape maintenance and C. Fertilization: Fertilize as Specified under 3.02-Tree and Shrub Care. shall have received training in ornamental horticulture and shall be fluent in English. D. Remove trash weekly. 1.4 MAINTENANCE PERIOD E. Edge groundcover to keep in bounds and trim top growth as necessary to achieve an overall Continuously maintain all areas involved in this Contract during the progress of the Work and during the maintenance period until final acceptance of the Work by the Owner's authorized F. Replace dead and missing plants at Contractor's expense. B. Improper maintenance or poor condition of any planting at the termination of the scheduled 3.4 GRASSES CARE maintenance period may cause postponement of the final completion date of the Contract. Maintenance shall be continued by the Contractor until all Work is acceptable. A. In October-November prune cool season grasses (Calamagrostis, Elymus, Fescues, C. In order to carry out the plant establishment Work, the Contractor shall furnish sufficient labor Helictotrichon, Koeleria, Melica, Nasella, Seslaria, Stipa) in preparation for seasonal rains and adequate to perform the Work during the plant maintenance period new growth period. D. Criteria for Start of Maintenance: Maintenance period shall not start until all elements of B. In February to March, prune warm season grasses (Acorus, Bouteloua, Calamagrostis, construction, planting, and irrigation for the entire Project are Substantially Complete. Project Miscanthus, Muhlenbergia, Pennisetum, Sporobolus) in preparation for spring growth. will not be segmented into maintenance phases unless specifically authorized in writing by C. Only cut flat across the top: no orbs, domes, rockets or torpedos. When too much old growth is left from the previous season or pruned at the wrong time, sunlight and air cannot get to the 029390 - 4 Landscape Maintenance 029390 - 1 Landscape Maintenance Las Canoas Water Las Canoas Wate Request an inspection to begin the plant maintenance period after all planting and related Work base of the plant where new growth starts, thus leaving the plant unable to regenerate itself has been completed in accordance with the Contract Documents. The project will not be considered complete for the maintenance period to begin unless all plants have been installed with mulch and any other surface protection in place. If such criteria are met to the satisfaction of the Landscape Architect, a field notification will be issued to the Contractor to establish the 3.5 IRRIGATION SYSTEM effective beginning date of the period. A. Set and program automatic controllers for seasonal water requirements. Give Owner's F. Any day when the Contractor fails to adequately maintain plantings, replace unsuitable plants or authorized representative keys to controllers and written instructions on how to turn off system do weed control or other Work, as determined necessary by the Landscape Architect, will not be credited as one of the plant maintenance Working days. B. Contractor is responsible for the complete operation and maintenance of the irrigation system G. The Contractor's maintenance period will be extended if the provisions required within the except as noted herein (See 1.05 - Guarantee and Replacement). Drawings and Specifications are not fulfilled. C. Repair/correct all damages/malfunctions to irrigation system at Contractor's expense. Make repairs within one (1) watering period. 1.5 GUARANTEE AND REPLACEMENT D. Check weekly all systems for proper operation, to include the following tasks: A. Guarantee all plant material installed under the Contract against any and all poor, inadequate or inferior materials and/or Workmanship for a period of one (1) year. Replace at Contractor's Check and flush 1/2" polyethylene lines once every week. expense any plant found to be dead or in poor condition due to faulty materials or Check and clean filters once every month. Workmanship, as determined by the Landscape Architect. Check drip emitters once every week for proper operation. Clear weed growth from around emitter areas. B. Replace immediately any materials found to be dead, missing or in poor condition during the Check exposed tubing for leaks and kinking. maintenance period. The Landscape Architect is the sole judge of the condition of material. Check pressure regulator for correct pressure setting (PSI). Replace material within ten (10) days of written notification by the Landscape Architect. Check controller program for correct operation. Adjust automatic controller program (four times per year) to accommodate seasonal water requirements. Give owner keys to C. The commencement of all Guarantees shall be noted in the Certificate of Substantial controller and written instruction on how to turn off system in case of emergency. Completion which shall be signed by the Owner, Contractor and Landscape Architect. E. Seasonal Application Adjustment 1.6 INSPECTIONS 1. Adjust water application according to the following guidelines: A. Request normal progress inspection from the Landscape Architect at least seven (7) days in a. For winter months (Dec.-Feb.): 25-50 percent of maximum mid-summer advance of anticipated inspection. Inspections are as follows: b. For fall and spring (Sept.-Nov., Mar.-May): 50-75 percent of maximum mid-Commencement of maintenance (Pre-maintenance). summer application rate. Perform watering in the early morning or late afternoon hours. At thirty (30) day intervals through maintenance period

END OF SECTION 029390

Landscape Maintenance

Completion of maintenance period - Final Walk-through: no more than ten (10) days

A. Prior to the date of the Final Walk-through, acquire from the Landscape Architect approved

B. All turn-over items noted in other Specification sections shall be delivered prior to Final Walk-

reproducible prints and record information from the job record set all changes made to all

drawings during construction, label said prints "Record Drawings", and deliver to the Landscape

029390 - 2

prior to end of maintenance period.

Architect and as required to any Local Agency.

1.7 FINAL ACCEPTANCE OF THE PROJECT

PART 2 - PRODUCTS

Landscape Maintenance

B. All conditions noted in Landscape Planting (Section 02950) apply herein.

Las Canoas Water

802 EAST COTA STREET, SUITE A SANTA BARBARA, CA 93103 TEL (805) 963-1955

CONSULTANTS

PLANNER SUZANNE ELLEDGE PLANNING & PERMITTING SERVICES 1625 State Street Santa Barbara, CA 93101 TEL (805) 966-2758

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MECHANICALCAL ENGINEER MECHANICAL ENGINEERING CONSULTANTS, INC. 1616 Anacapa Street Santa Barbara, CA 93101 TEL (805) 957-4632

FIRE PROTECTION ENGINEER COLLINGS & ASSOCIATES, INC. 260 Maple Court, Suite 241 Ventura, CA 93001 TEL (805) 658-0003

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ARCHITECT STAMP CONSULTANT STAMP No. 2911 are Tomano EXP. 08/31/20 FOF CALIFOR

AGENCY APPROVAL

REVISIONS DESCRIPTION

THE ARCHITECT DOES NOT REPRESENT THAT THESE PLANS OR THE SPECIFICATIONS ARE SUITABLE FOR ANY SITE OTHER THAN THE ONE FOR WHICH THEY WERE SPECIFICALLY PREPARED. THE ARCHITECT DISCLAIMS RESPONSIBILITY FOR THESE PLANS AND SPECIFICATIONS IF THEY ARE USED IN WHOLE OR IN PART AT ANY OTHER SITE

PROJECT OWNER & TITLE

REVERE CAPITAL, LLC 2301 CEDAR SPRINGS RD. SUITE 200 DALLAS, TX 75201

WATER UTILITIES IMPROVEMENTS

1964 LAS CANOAS ROAD SANTA BARBARA, CA 93105

SHEET TITLE

DRAWN BY: QP

029390 - 5

PLANTING SPECIFICATIONS

JOB NUMBER: 18045.04

LP-5



Proposed Perspective A

Proposed Perspective B

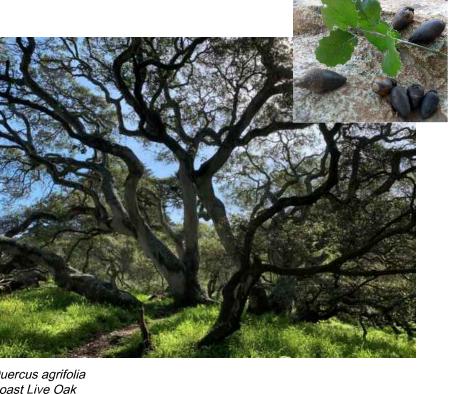
Proposed Perspective C













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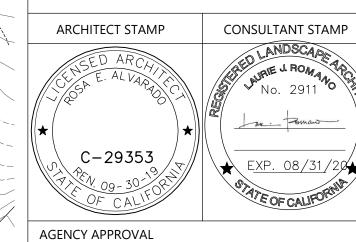
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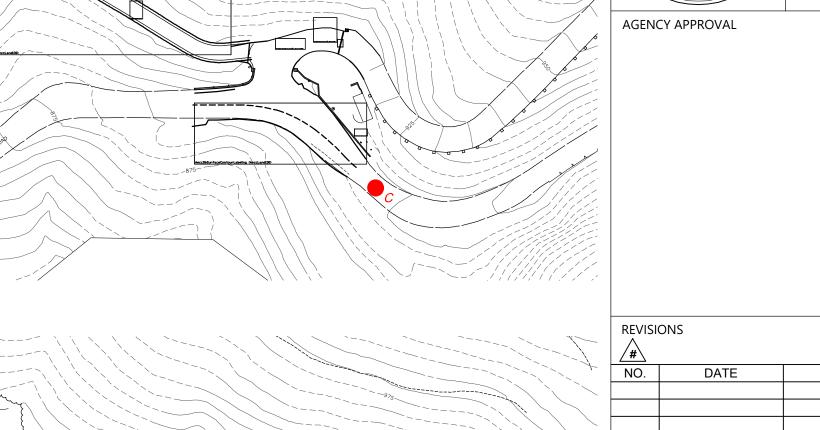
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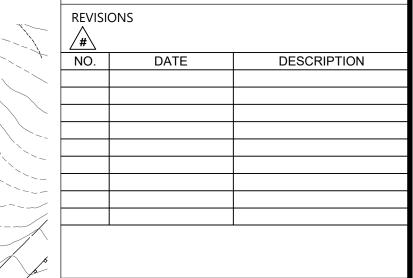
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PROJECT OWNER & TITLE REVERE CAPITAL, LLC 2301 CEDAR SPRINGS RD, SUITE 200

WATER UTILITIES **IMPROVEMENTS**

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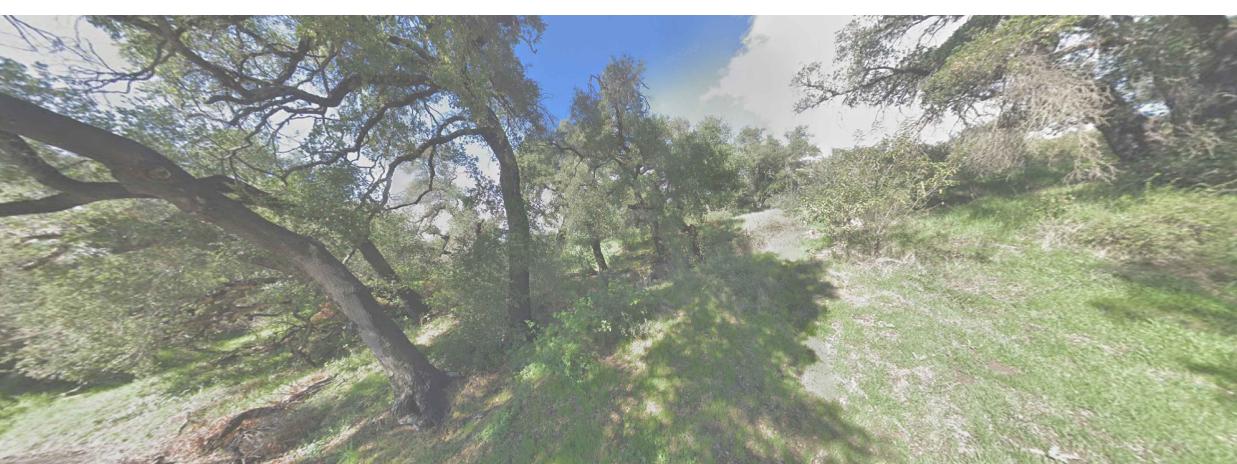
DALLAS, TX 75201

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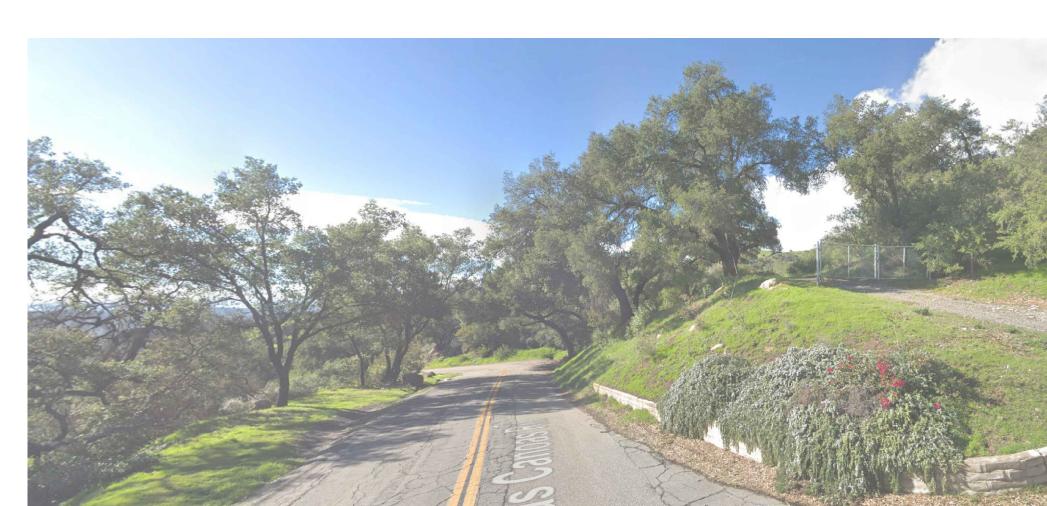
IMAGES & PERSPECTIVES

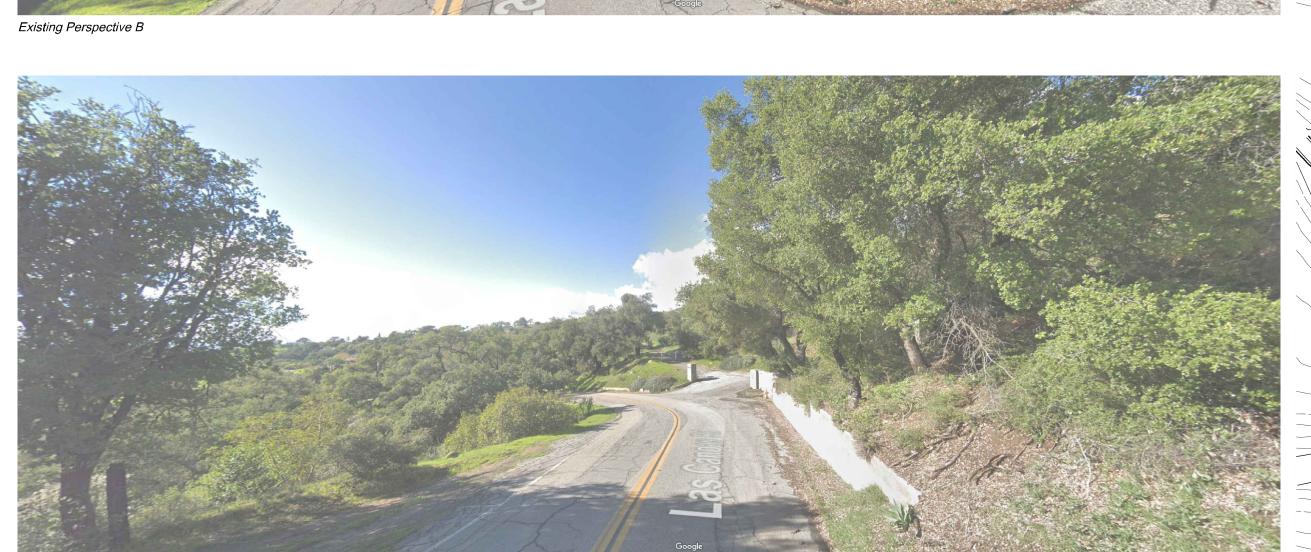
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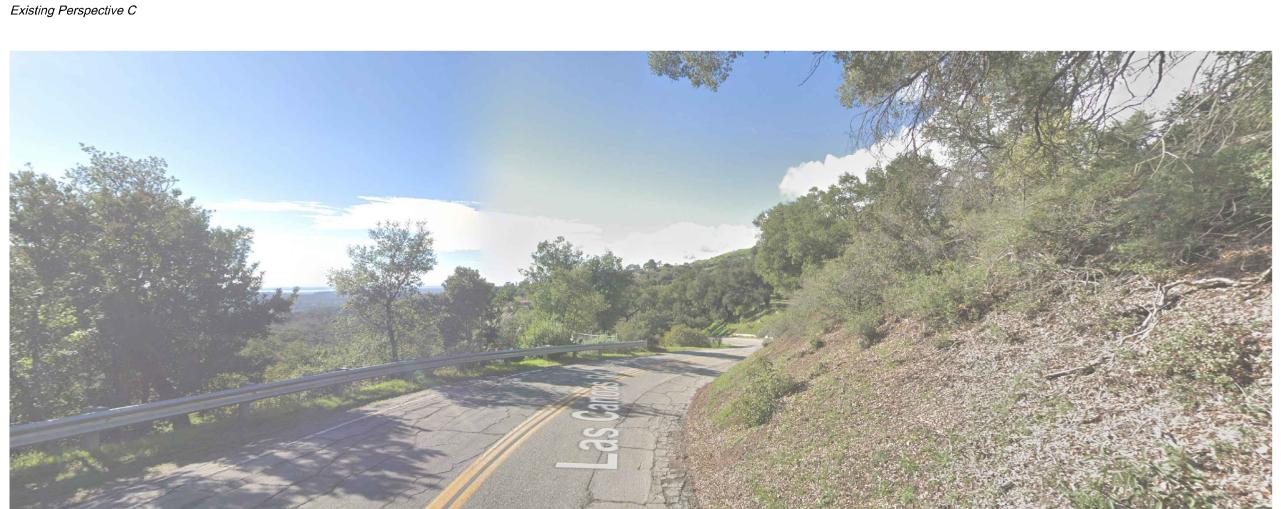
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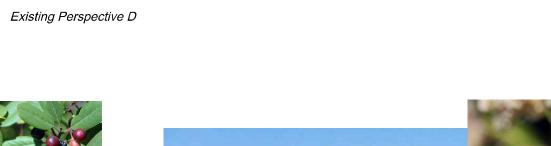














Quercus agrifolia Coast Live Oak



